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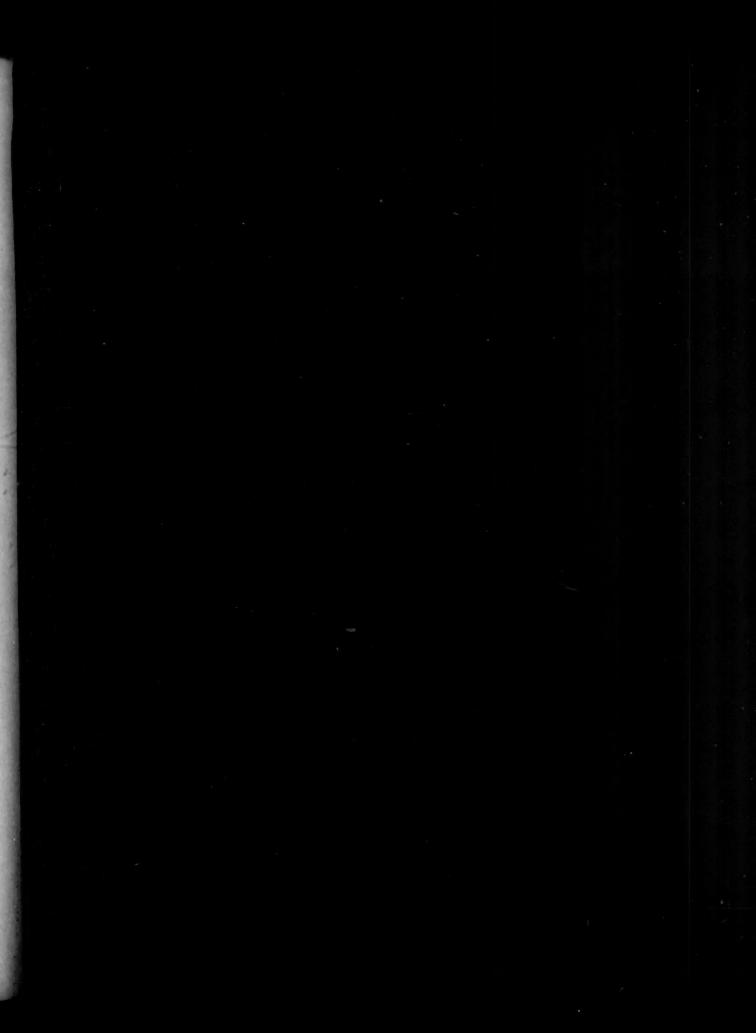
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Ukkonen, Esko The equivalence problem for some non-real-time deterministic pushdown automata. (83j:68058)

Umeo, Hiroshi (with Morita, Kenichi; Sugata, Kazuhiro) Deterministic one-way simulation of two-way real-time cellular automata and its related problems.

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Schmidt, Jürgen Algebraic studies of first-order enlargements. 83d:83071

Takeuchi, Yu Representation of nonstandard numbers by means of the asymptotic

behavior of real functions. (Spanish) 83c:03060

nin (with Vopenka, Petr) The axiom of reflection. (83j:03087) Vencovska, Alena Constructions of endomorphic universes and similarities. (83k:03066) Vopěnka, Petr See Sochor, Antonín, (83j:03087)

03H99 None of the above, but in this section

04-XX SET THEORY

04-01 Elementary exposition, textbooks

Cheng, Ji Tai About the recursion theorem on the set of natural numbers. (Chinese) 83:04001

usen, Rodney T. (with Swanson, Leonard G.) Placing the pigeonhole principle within the defining axioms of the integers. 83f:04001

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Sebastian, Hans-Jürgen Ser Sieber, Norbert; et al., 83e:04001

Sieber, Norbert (with Sebastian, Hans-Jürgen; Zeidler, Günter) ***Grundlagen der Mathematik, Abbildungen, Funktionen, Folgen. (German) [Foundations of mathematics, mappings, functions, sequences] 83e:04001

Sinkevich, V. K. A modification of the equivalence theorem. (Russian) 83j:04001

Stein, Martin Eine Bemerkung zur Wohlordnungseigenschaft der natürlichen Zahlen. [A remark on the property of well-orderedness of the natural numbers] 83f:04002

Stell, Robert R. ** Set theory and logic. 83e:04002

Swanson, Leonard G. Ser Hansen, Rodney T., 83f:04001

Zeidler, Günter See Sieber, Norbert; et al., 83e:04001

secondary classificati

Dijkstra, Eduger W. Mathematical induction and computing science. (83:68017)
Stabl, Gerold The diagonal method in act theory and metamathematics. (Spanish)
(83g:63001)

Vopēnka, Petr ★Mathematics in the alternative set theory. (835:63651)

04-02 Advanced exposition (research surveys, monographs, etc.)

mqul, Rolando Basim ★Axiomatic set theory. 83e:04003 rovichenko, I. I. ★Теория операций над множествами. (Russian) [The theory of operations on sets] 83m:04001

04-03 Historical (must also be assigned at least one classification number from Section 01)

(Cantor, Georg) See Kreiser, L., (83±01034) and Grattan-Guinness, L., (83±01026)
Cassinet, Jean L'axiome multiplicatif et autres formes de l'axiome du choix chez Russell
et Whitehead. [The multiplicative axiom and other forms of the axiom of choice in
Russell and Whitehead] (83±01047)
(Darboux, Gaston) See Gispert-Chambaz, Héèène, (83±01038)
Garciadiego, Alejandro. See Moore, Gregory H., (83±01037)
Gispert-Chambaz, Héèène ★Camille Jordan et les fondements de l'analyse. (French)
[Camille Jordan and the foundations of analysis] (83±01038)
Grattan-Guinness, L. Georg Cantor's influence on Bertrand Russell. (83±01026)
(Houst. Jacques) See Gispert-Chambaz, Héèène. (83±01038)

(Hould, Jacques) See Gispert-Chambaz, Hébne, (83:601038) (Jordan, Camille) See Gispert-Chambaz, Hébne, (83:601038) Kreiser, L. W. Wundts Auffassung der Mathematik.—Briefe von G. Cantor and W. Wundt. [W. Wundt's conception of mathematics. Letters of G. Cantor and W. Wundt) (834:01034)

Langhammer, Walter Ontologic im Entdeckungszusammenhang des Russell-Paradoxons.

[Ontology in connection with the discovery of Russell's paradox] (83f:63609)

Modvedev, F. A. On the problem of completeness in the theories of real numbers.

(Russian) (83g:01035)

(Russan) (3291035)
Moore, Gregory H. (with Garciadiego, Alejandro) Burali-Forti's paradox: a reappraisal of its origins. (French summary) (83d:01037)
(Russell, Bertrand A. W.) See Grattan-Guinness, L., (83g:01026)
Scheefer, Helbaust H. Georg Cantor und das Unendliche in der Mathematik. [Georg Cantor and the infinite in mathematics] (83i:01076)

(Wundt, W.) See Kreiser, L., (83d:01034)

Darboux, Gaston See Gispert-Chambaz, Hélène, (83:01038)

- 04-04 Explicit machine computation and programs (not the theory of computation or programming)
- 04-06 Proceedings, conferences, etc.
- 04A05 Relations, functions [See also 08A02.]

Arora, Sudhir K. (with Smith, Kenneth C.) A theory of well-connected relations. 83le04001

Both, N. (with Purdea, I.) Dually crossed relations. 83m:04002.
Chimer, K. N. The existence of subfunctions with certain characteristics. (Bulgarian. English and Russian summaries) 83c:04001

Some invariant properties of functions. (Bulgarian. English and Russian summaries) 83c:04002

(with Ruseva, L. K.) Structural properties of functions. (Bulgarian. English and

Russian summaries) 83c:04003

Separable subsets of arguments of functions. (Bulgarian. English and Russian summaries) 83d:04001

Structural properties of functions. (Bulgarian. English and Russian summaries)

Separable triples of functions. (Bulgarian. English and Russian summaries)
83g/04001a

Separable subsets of arguments of a class of functions. (Bulgarian. English and Russian summaries) 83g:04001b

Some invariant properties of functions. (Russian. English and Hungarian numaries) 83m:04003

Forys, Wit On some characterization of nonfixed points of mappings. 83k:04001 Leutola, K. (with Nieminen, Juhani) Binary relations, flou relations and application. (Russian and Polish summaries) 83c:04004

Levitz, Hilbert Calculation of an order type: an application of nonstandard methods

Milev, L. K. Generalized relations. (Bulgarian. English and Russian summaries)

Moran, Gadi (with Strauts, Dona) Countable partitions of product spaces. £18:04002. Nieminen, Juhani Ser Leutola, K., \$3:c04004. Postavskii, S. A. Ser Sarnavskii, N. G., \$3:c04005a. Postavsk. S. A. Ser Sarnavskii, N. G., \$3:c04005a. Postavsk. Ales On the size of conjunctive representations of n-ary relations. \$3:c04005. Purdea, I. Relations de tolerance particle. [Partial tolerance relations] \$3:c04006. Ser also Both, N., \$3:c04002.

rva, L. K. Ser Chimer, K. N., 83c04003

Sarnavskii, N. G. (with Poslavskii, S. A.) Predicates on sets. I. (Russian) 83er0406 (with Shabanova-Kushnarenko, Z. Yu.) Predicates on sets. II. (Russian) B3c04005b

Shabanova-Kunhuarenko, Z. Yu. See Surmovskii, N. G., 83c:04005 Smith, Kenneth C. See Arora, Sudhir K., 83h:04001 Strauss, Dona See Moran, Gadi, 83h:04002

Both, N. See Purdea, I., (R3k:98004)
Chajda, Ivan (with Duda, Jaromir) Blocks of binary relations. (R3b:08001)
Chimev, K. N. Separable sets of arguments of functions. (Russian English and Hungarian summaries) (R3m:08009)
Cumingham, William H. (with Edmonds, Jack) A combinatorial decomposition theory. (R3c:05000)

Demetrovics, János (with Gyepesi, György) On the functional dependency and some generalizations of it. (#34:68018)

generatizations of H. (Riteriottis)
Duda, Jaromir See Chajda, Ivan. (Riteriottis)
Edmonds, Jack See Camingham, William H., (Rice16098)
Ehrenfeucht, Andrzej (with Kahn, Jeff; Maddux, Roger; Mycielski, Jan) On the dependence of functions on their variables. (Rim:00004)

dependence of functions on their variables. (R3m:00004)
Fuchs, Eduard On the o-category of linite chains. (R3m:00004)
Fuchs, Eduard On the o-category of linite chains. (R3m:00004)
Fuchs, Eduard On the o-category of linite chains. (R3m:00004)
Gumb, Raymond D. See Wester, George, (R3m:0003)
Gyepesi, György See Demetrovics, János. (R3d:00018)
Hagendorf, Jean Guillaume Extensions immédiates de chaines. [Immediate extensions of chains] (R3f:00001)
Hyunin, O. K. (with Novikov, B. V.) Transitive modifications of majorizing relations. (Russian) (R3l:00001)
Kalma, Jeff See Ehrenfeucht, Andraej; et al., (R3m:00004)
Kalman, Dan Central functions and fixed points. (R3g:20006)
Maddax, Roger See Ehrenfeucht, Andraej; et al., (R3m:00004)
Mycielski, Jan See Ehrenfeucht, Andraej; et al., (R3m:00004)
Narens, Louis On the scales of measurements. (R3d:00004)
Novikov, B. V. See Ilyunin, O. K., (R3s:00001)
Parovichenko, I. I. **Teopus omepaunit mag ammeremanx.* (Russian) [The theory of operations on sets] (R3m:04001)
Purdea, I. (with Both, N.) **ransitive tolerances. (R3k:00002)
Taskkova, B. S. (with Velicum V.) **R. S. (R3s:00002)

Purslea, I. (with Both, N.) a-transitive tolerances. (83a:08004)

Rakhula, M. O. On the theory of mappings. (Russian) (83a:08002)

Tashkova, B. S. (with Velinov, Yu. P.) Simple functional decomposition. (Bulgarian. English and Russian summaries) (83g:08006)

Velinov, Yu. P. Ser Tashkova, B. S., (83g:08006)

Weaver, George (with Gumb, Raymond D.) First order properties of relations with the monotonic closure property. (83e:03053)

04A10 Transfinite numbers

Abian, Alexander A well ordering of the Cartesian product of two ordinals. 83j:94003 Christian, Curt Drei Kriterien für Monotonie und Normalität von

Ordinalzahlenfunktionen sowie einige Konsequenzen deralben. [Three criseria for monotonicity and normality of ordinal functions, and some of their consequences]

Klaua, Dieter Interval components of non-Archimedean number systems. 834:04002
Inhomogene Operationen reeller Ordinalzahlen. [Inhomogeneous operations on real ordinal numbers] 834:04003
Labbé, Marcel Une caractérization de l'intervalle des nombres ordinaux dénombrables à

l'aide de la classification isomorphe des espaces de fonctions continues. [A characterization of the interval of countable ordinal numbers by means of the isomorphic classification of spaces of continuous functions] 83j:8406

de Alexandre, Luiz Paulo (with Carnielli, Walter Alexandre) Transfinite induction on ordinal configurations. (834:03057)

Bagemihl, Frederick Localization of Patai's theorem on alephs. (83e:04009)

Bonnet, R. (with Pouzet, M.) Linear extensions of ordered sets. (83k:06004)
Carnielli, Walter Alexandre Ser de Alcantara, Luiz Paulo, (83k:06005)
Davey, Brian A. (with Duffus, Dwight) Exponentiation and duality. (83k:06003)
Duffus, Dwight Ser Davey, Brian A., (83k:06003)

Jech, Thomas On hereditarily countable sets. (83e-64007)

Krawczyk, Adam (with Pelc, Andrzej) On families of e-complete ideals. (83j-80006)

Marquetty, Antoine Le continu et l'homme de la caverne. [The continuum and the cavernan] (83b-00002)

Pelc, Andrzej See Krawczyk, Adam, (83j:03086) Pouzet, M. See Bonnet, R., (83h:06004)

04A15 Descriptive set theory; Borel classifications, Suslin schemes, etc. [See also 03E15, 28A05, 54H05.]

Srivatsa, V. V. A remark on analytic sets with ø-compact sections. 83h:04003

secondary classifications:

urgain, Jean A stabilization property and its applications in the theory of sections. (KNh:28602)

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onduche, François Les jeux de Wadge. [Wadge games] (83h:03067)

likner, Nell Generalizations of analytic and standard measurable spaces. (83g:28001)

ressurer, William G. An axiom for nonseparable Borel theory. (83e:03043)

ardner, R. J. (with Gruenhage, G.) Finite Borel measures on spaces of cardinality less
than c. (83e:5-6003)

Gardner, R. J. (with Gruenhage, G.) Finite Borel measures on spaces of cardinality less than c. (83e:5483)
Gruenhage, G. See Gardner, R. J., (83é:5483)
Gruenhage, G. See Gardner, R. J., (83é:5483)
Gruenhage, G. See Gardner, R. J., (83é:5483)
Gruenhage, G. See Gardner, R. J., (83é:5483)
Gruenhage, G. See Gardner, R. J., (83é:5483)
Gruenhage, G. See Gardner, R. J., (83é:5483)
Hansell, Reger W. Point-finite Borel-additive families are of bounded class. (83e:54034)
Hillard, Gérard Exemples de normes en théorie descriptive des ensembles. [Examples of norms in descriptive set theory] (83e:54653)
Kanovei, V. G. (with Ostrovskii, A. V.) On non-Borel F₁ sets. (Russian) (83e:54055)
Leilèrve, Gilbert Le problème de Souslin. [The Suslin problem] (83e:03082)
Maltina, Ashok An effective selection theorem. (83m:03060)
Martin, Donald A. (with Moschovakis, Yiannis N.; Steel, John R.) The extent of definable scales. (83):30061)
Mandalin, R. Dansiel (with Sarbadhikari, H.) Continuous one-to-one parametrizations. (French summary) (83é:28015)
Bimeasurable functions. (83e:54027)
Projective well-orderings and extensions of Lebesgue measure. (83m:28004)
Moschovakis, Yiannis N. See Martin, Donald A.; et al., (83):03081)
Ostrovskii, A. V. See Kanovei, V. G., (83e:54055)
Pele, Andrzej Ideals on the real line and Ulam's problem. (83b:03057)
Sarbadabikari, H. See Mauddia, R. Daniel, (83b:28015)
Serivatsa, V. V. Measurable parametrizations of sets in product spaces. (83e:54035)

Servatsa, V. V. Measurable parametrizations of sets in product spaces. (83e-54035) Steel, John R. See Martin, Donald A.; et al., (83j-03061)

04A20 Combinatorial [See also 05A05.]; filters

rigento, Tullio On families of sets more general than filters. (Italian. English summary) Agrig

Bukovský, L. (with Butkovičová, E.) Ultrafilter with No predecessors in Rudin-Frolik

vá, E. See Bukovský, L., 83b:04001

Erdős, Paul Problems and results on finite and infinite combinatorial analysis. II.

Problems and results on finite and infinite combinatorial analysis. II. 83e:04006b Hanazawa, Masazumi On the ideal of those subsets of ω₁ that are thin with respect to diamond property. 83a:04004 Kansi, Yasuo About κ*-saturated ideals. 83e:04007 Kubota, Nobuo Length of an increasing sequence of ideals. 83b:04002 Larson, Jean A. A counterexample in the partition calculus for an uncountable ordinal. 83i:04006

83j-04006

Pelletier, Donald H. A simple proof and generalization of Weglorz' characterization of normality for ideals. 83c-04006

Shelah, Saharon Canonization theorems and applications. 83j-04007

Taylor, Alan D. Regularity properties of ideals and ultrafilters. 83h-04003

Weglorz, B. Large invariant ideals on algebras. 88f-04004

Williams, N. H. Set mappings defined on pairs. 83a-04001

Families of sets having property B. 83a-04002

Abbott, H. L. (with Liu, Andy C. F.) On property B(s). II. (83m:05003)

Balcar, B. (with Frančk, F.) Independent families in complete Boolean algebras.
(83m:06020)

Blass, Andreas A partition theorem for perfect sets. (83k:03063)

Chan, Shu Park. See Onaga, Kenji, (83m:05123)

Chan, J. T. A note on minimal rings and fields. (83j:28002)

Danil'chenko, A. F. On parametrical expressibility of the functions of k-valued logic.
(83k:03031)

van Douwen, Eric K. (with Kunen, Kenneth) L-spaces and S-spaces in $\mathcal{P}(w)$.

(83k:54003)

Droste, Manfred (with Göbel, Rüdiger) Products of conjugate permutations. (83j:20008)

Eklof, Paul C. On singular compactness. (83f:20044) Frančk, F. See Balcar, B., (83m:06020)

Frankl, Peter (with Katona, G. O. H.) If the intersection of any r sets has a size ≠r-1.

(83e:05005)

Göbel, Rödiger See Droste, Manfred, (83):20008)

Gronau, Han-Dietrich O. F. (with Proske, Chr.) Maximal families of restricted subsets of a finite set. (83m:05013)

Henle, James M. (with Zwicker, William S.) Ultrafilters on spaces of partitions. (83g-03049)

(83a:2049)

Johnson, P. D. Coloring abelian groups. (83k:20059)

Johnson, Bjarni Arithmetic of ordered sets. (83k:06004)

Katona, G. O. H. See Frankl, Péter. (82e:05005)

Kemoto, Nobuyuki A characterization of the existence of a Souslin line. (83a:54037)

Kunen, Kenneth See van Douwen, Eric K., (83k:54003)

Liu, Amby C. F. See Abbott, H. L., (83m:05003)

MacNerney, J. S. Finitely additive set functions. (83c:46001)

Margush, T. (with McMorris, F. R.) Consensus n-trees. (83m:92075)

Milmer, E. C. (with McMorris, F. R.) Consensus n-trees. (83m:92075)

Milmer, E. C. (with Pouret, M.) On the cofinality of partially ordered sets. (83k:06003)

Odell, E. Applications of Ramsey theorems to Banach space theory. (83g:46018)

Onaga, Kenji (with Chan, Shu Park) Blocking systems of a graph and ∪ ∩ interchange equality in bottleneck problems involving sets and fuzzy sets. (83m:05123)

Plotkin, A. A. Measure of classification independence. (83b:62115)

Pouret, M. See Milner, E. C., (83k:06003)

Proske, Chr. See Gronni, Hans-Dieta. A. F., (83m:05013)
Schwartz, Thomas No minimally reasonable collective-choice process can be strategy-proof. (83m:90014)
Shteinbuk, V. B. Certain semigroups of endomorphisms of filters. (Russian) (83e:20077)
Todorčević, Stevo B. On minimal separating Boolean algebras. (83e:06017)
Weiss, William A. R. The equivalence of a generalized Martin's axiom to a combinatorial

principle. (83a:03051) Zwicker, William S. See Henle, James M., (83g:03049)

04A25 Axiom of choice and equivalent propositions (Zorn's lemma, etc.) [See also 03E25.]

Cowen, Robert H. Partition principles for properties of finite character. 83j:94008 Drik, Wojchech The existence of Lindenbaum's extensions is equivalent to the axiom of choice. 83f:04005

s On hereditarily countable sets. 83e:04007

nan, Martin M. Choosing I-element subsets of n-element sets. 83a:04003

Brunner, Norbert o-kompakte Räume. (English summary) [o-compact spaces] (83:54025)
Cassinet, Jean L'axiome multiplicatif et autres formes de l'axiome du choix chez Russell et Whitehead. [The multiplicative axiom and other forms of the axiom of choice in Russell and Whitehead] (83e:01047)

Moran, Gadi (with Strauss, Dona) Countable partitions of product spaces. (83h:04002) Strauss, Dona See Moran, Gadi, (83h:04002)

04A30 Continuum hypothesis, generalized continuum hypothesis [See also 03E50, 54A251

hi, Frederick The special 3-, n-, N₀-segment properties and continuum hypotheses. assian summary) 83e-04008

Localization of Patai's theorem on alephs. 83e:04009

secondary classifications:

van Douwen, Eric K. (with Kunen, Kenneth) L-spaces and S-spaces in $\mathcal{G}(w)$.

(83k:54003)

Kunen, Kenneth See van Douwen, Eric K., (83k:54003)

Roftman, Judith Partitioning spaces which are both right and left separated. (83f:54005)

Williams, Scott W. Trees. Gleason spaces and controlling of the processing of the p

is, Scott W. Trees, Gleason spaces, and coabsolutes of \$N~N. (83d:54060)

04A99 Miscellaneous topics

Abian, Alexander On a property of countable partitioning of the continuum without the use of Koenig's lemma. 83m:04005

Hickman, J. L. A note on the concept of multiset. 83:e04004

Malina, Stefan Notes on a method of introducing real numbers. (Slovak. English and Russian summaries) 83e:04010

secondary classifications

Lopes, J. Antunes Connections between descriptive geometry and the theory of sets. (Portuguese) (83m:51032)

padopoulos, Athanase D. Espace des contradictions. [The space of contradictions]

(83f:81018)

Singh, Dasharath A remark on Quine's individuals. (83g:03056)

05-XX COMBINATORICS (For finite fields, see 12Cxx.)

05-01 Elementary exposition, textbooks

Egle, Kuno

Graphen und Präordnungen. (German) [Graphs and preorders] 83e:05001
Temperley, H. N. V.

Graph theory and applications. 83e:05001

econdary classification

Dynkin, E. B. (with Uspenskii, V. A.) ★Mathematische Unterhaltungen. (German) [Mathematical conversations] (83m:00006)

Ebert, Jürgen ★Effiziente Graphenalgorithmen. (German) [Efficient graph algorithms]

(83):68

(83):68076)

(Eisenreich, Günther) See Mathematical mosaic, (83e:00009)

Evstigneev, V. A. (with Mcl'nikov, L. S.) *3aawm m упражления по теории графов и комбинаторике. (Russian) [Problems and exercises in graph theory and combinatorics] (83m:00007)

(Friedel, Peter) See Dynkin, E. B.; et al., (83m:00006)

(Hodi, Endre) See Mathematical mosaic, (83e:00009)

Honsberger, Ross *Mathematische Edelsteine der elementaren Kombinatorik, Zahlentheorie und Geometrie. (German) [Mathematical germs from elementary combinatorics, number theory and geometry] (83d:00003)

Mel'nikov, L. S. See Evstigneev, V. A., (83m:00007)

(Schwaiger, Jens) See Honsberger, Ross, (83d:00003)

Siemon, Helmut *Anwenduagen der elementaren Gruppentheorie in Zahlentheorie und Kombinatorik. (German) [Applications of elementary group theory in number theory and combinatorics] (83m:20003)

and combinatorics] (83m:20003)

Uspenskii, V. A. See Dynkin, E. B., (83m:00006)

Mathematical mosaic

*Mathematical mosaic (83e:00009)

**Immatisches Mosalk See Mathematical mosaic, (83e:00009)

05-02 Advanced exposition (research surveys, monographs, etc.)

Bannai, Elichi Algebraic combinatorial theory. (Japanese) 83e:05001 Shrikhande. S. S. (with Singhi, Navin M.) Designs, adjacency multigraphs and embeddings: a survey. 83e:05002 Singhi, Navin M. See Shrikhande, S. S., 83e:05002

secondary classifications:

Abe, Gakuhō Shūtarō Teramura and the recent progress of studies of magic squares in Japan. (Japanese) (83d:01005)
Babal, Lászhō On the abstract group of automorphisms. (83a:05064)
Bate, John Aubrey (with Stanton, R. G.) A survey of (2,2, L, V) designs. (83b:05038)
Bullothis, Bella Random graphs. (83a:05039)
Burosch, Gustaw See Yahlomkii, S. V.; et al., (83a:04001b) and Glagolev, V. V.; et al.,

tz, Lothar *Connectivity in multifactor designs. (83a:05069)
sung, F. R. K. (with Graham, R. L.) Recent results in graph decompositions.
(83a:05118)

Cockayne, E. J. (with Miller, D. J.; Yao, Fang Zu) Rotation numbers for rooted graphs

-a survey. (83f:05031) (Dassow, Jürgen) See Glagolev, V. V.; et al., (83e:94001a) and Yablonskii, S. V.; et al., (83e:94001b)

Deza, Michel (with Mullin, R. C.; Vanstone, Scott A.) Recent results on (r, λ)-designs

and related configurations. (Spanish summary) (83::05016)
(Dipper, Richard) See Dlab, Vlastimil B., (834:16030)
Dlab, Vlastimil B. *An introduction to diagrammatical methods in representation

theory. (83d:16030)

Glagolev, V. V. (with Yablonskii, S. V.; Levenshtein, V. I.; Zhuravlev, Yu. I.; Vasil'ev, Yu. L.; Vetukhnovskii, F. Ya.) ★Diskrete Mathematik und mathematische Fragen der Kybernetik. (German) [Discrete mathematics and mathematical problems of cybernetics] (83e:94001a)

See also Yablonskii, S. V.; et al., (83e:94001b)

Goulden, I. P. See Stanton, R. G., (83e:940 Graham, R. L. See Chung, F. R. K., (83e:05118) Grünbaum, Branko, (1974) Christian, 1974

Grünbaum, Branko (with Shephard, Geoffrey C.) The geometry of planar graphs.
(83a:05056)

Harary, Frank Generalized Ramsey theory. I to XIII. Achievement and avoidance

ers. (83a:05100)

(Harnau, W.) See Glagolev, V. V.; et al., (83e:94001a) and Yablonskii, S. V.; et al.,

(83e-94001b)

Hughes, Daniel R. On designs. (83h:05014)

(Klesewetter, H.) See Glagolev, V. V.; et al., (83e:94001a) and Yablonskii, S. V.; et al., (83e:94001b)

Klarner, David A. My life among the polyominoes. (83e-05638)

Laskar, Renu (with Walikar, H. B.) On domination related concepts in graph theory. (83g:05070)

Levenshtein, V. L. See Glagolev, V. V.; et al., (83e:94001a) and Yablonskii, S. V.; et al., (83e:94001b)

Lim, Chong Keang Problems in graph theory. VI. Cayley graphs. (83k:05039a) (Lupanov, O. B.) See Glagolev, V. V.; et al., (83e:94001a) and Yablonskii, S. V.; et al., (83e:94001b)

Maffioli, Francesco Couplages et matroides. [Matchings and matroids] (83c:05038) Miller, D. J. See Cockayne, E. J.; et al., (83f:05031) Mullin, R. C. See Deza, Michel; et al., (83c:05016)

Nash-Williams, C. St. J. A. A glance at graph theory. I. (83h:05033a)
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06-02 Advanced exposition (research surveys, monographs, etc.)

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06-06 Proceedings, conferences, etc.

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ssow, Andreas Parallelarbeitende Sortieralgorithmen. [Sorting algorithms that work in parallel 83f:06002

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Kofner, Jacob Products of ordered spaces and transitivity. (83a:54038)

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Maurice, M. A. (with Hart, K. P.) Some general problems on generalized metrizability and cardinal invariants in ordered topological spaces. (83a:54039)

Moran, Gadi Ordinals and scattered compact ordered spaces. (83g:54045)

Ostaszewski, A. J. Continuous images of the lexicographic double interval and the problem of projective sets in general spaces. (83a:54040)

Pshenichnov, V. I. On the structure of an l-group with the o-topology and the o*-topology. (Russian) (83j:66023)

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Todorčević, Stevo B. On a theorem of D. Kurepa. (83m:54062)

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Williams, Scott W. Spaces with dense orderable subspaces. (83b:54043)

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Testov, V. A. Left-positive quasigroups with a lattice order. (Russian) (83m:20099)

08-XX GENERAL MATHEMATICAL SYSTEMS

08-01 Elementary exposition, textbooks

Burris, Stanley (with Sankappanavar, H. P.) *A course in universal algebra. 83k:08001 Lugowski, Herbert *Grundzüge der universellen Algebra. (German) [Fundamentals of universal algebra] 83e:08001

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Lipson, John D. **Elements of algebra and algebraic computing. (83b:00005)

08-02 Advanced exposition (research surveys, monographs, etc.)

08-03 Historical (must also be assigned at least one classification number from Section 01)

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Malykhina, G. I. R. Grassmann's Forms of rigorous science and their relation to natural language. (Russian) (83h:01044)

Smith, G. C. De Morgan and the laws of algebra. (83c:01031)

08-04 Explicit machine computation and programs (not the theory of computation or programming)

08-06 Proceedings, conferences, etc.

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08A35 Automorphisms, endomorphisms

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Sydow, Walter On regular-projective spaces in topological-algebraic categories.
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Urquhart, Alasdair Projective distributive p-algebras. (83b:06009)

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naschewski, Bernhard On the category invariance of cardinalities in a prevariety. 83e:09024

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Bergman, George M. . Hyperidentities of groups and semigroups. 83a:08016
Goraktik, P. (with Koubek, Václav) Pseudovarieties and pseudotheories. 83c:08010
Ježek, Jaroslav The number of minimal varieties of idempotent groupoids. 83g:08009
Koubek, Václav See Goraktik, P., 83c:08010
Martynov, L. M. The groupoid of prevarieties of semigroups with zero. (Russian)
RNi-08014

Polish, Libor Weak equivalence of varieties. 83f:68022
Protasov, I. V. Varieties of topological spaces. (Russian. English summary) 83m:68014
Taylor, Walter Hyperidentities and hypervarieties. 83m:68015
Werner, Heinrich A duality for weakly associative lattices. 83h:68015

Baieson, Ann Fundamental groups of topological R-modules. (83e:57031)
Clarke, G. T. Semigroup varieties of inflations of unions of groups. (83e:20083)
Davey, Brian A. Dualities for Stone algebras, double Stone algebras, and relative Stone

algebras. (83m:06011)
Genov, Georgi K. Some Specht varieties of associative algebras. (Russian) (83h:16016)
Golubchik, I. Z. (with Mikhalev, A. V.) Varieties of algebras with a semigroup identity.

(Russian. English summary) (831:16026)
schigdorzh, R. Varieties of associative algebras over an infinite field of characteristic
p>2 with ∩- and ∪-distributive products of subvarieties. (Russian) (831:16026)

Kemer, A. R. Decomposition of varieties. (Russian) (83:16019)
Koryakov, I. O. Basis ranks of varieties of idempotent semigroups. (Russian) (83h:20063)
Kushkulel, A. Kh. Quasivarieties of nilpotent groups connected with varieties of representations. (Russian) (83h:20032)

Lampe, William A. (with Taylor, Walter) Simple algebras in varieties. (83e:08012)
Magari, Roberto First results on the Boolos variety. (Italian. English summary)

See Golubchik, I. Z., (83f:16026)

Mikhalev, A. V. See Goldberms, J. Z., (SN:100209)
 Ontes-Williams, Sheila Graphs and universal algebras. (83f:05069)
 Taylor, Walter See Lampe, William A., (83e:08012)
 Zaitsev, M. V. Decomposability of varieties of Lie algebras and groups into a product of commutators. (Russian) (83m:17011)

08Cxx Classes of algebras

08C05 Categories of algebras [See also 18C05.]

Adámek, Jiří (with Šedivá-Trnková, Věra) Varietors and machines in a category. 835-08016

Šedivá-Trnková, Věra Sec Adámek, Jiří, 83h:08016

secondary classifications:

Adimek, Jiří (with Strecker, George E.) On the largest initial completion of categories of algebras. (83g:18002)

Banaschewski, Bernhard A lemma on flatness. (83f:18018)
Obtulowicz, Adam (with Świrszcz, Tadeusz) A construction of free algebras and the problem of extension of algebras. (83i:18010)

Pigozzi, Don Varieties of pseudo-Post algebras. (See 83m:94032)

On the structure of equationally complete varieties. I. (R3j:08005) Strecker, George E. See Adámek, Jiří, (R3g:18002) Świrszcz, Tadeusz See Obtulowicz, Adam, (R3i:18010)

08C10 Axiomatic model classes [See also 03Cxx, in particular 03C60.]

Padmanabhan, R. (with Plonka, J.) Idempotent reducts of abelian groups. 83c:08011 Plonka, J. See Padmanabhan, R., 83c:08011

secondary classifications:

Fisher, John R. Axiomatic radical and semisimple classes of rings. (83d:16008)

08C15 Quasivarieties

Gorbunov, V. A. (with Smirnov, D. M.) Finite algebras and the general theory of quasivarieties. 83c:08012

Nemeti, Istvim Dynamic algebras of programs. 83:e8009

Sapir, M. V. Varieties with a finite number of subquasivarieties. (Russian) 83e:08025

Smirnov, D. M. - Varieties and quasivarieties of algebras. 83f:08023

See also Gorbunor, V. A., 83c:08012
Wroński, Andrzej Splittings of lattices of quasivarieties (abstract). 83a:08018

secondary classifications:

Andréka, Hajnal (with Burmeister, Peter; Németi, István) Quasi-equational logic of partial algebras. (83d:03036)

Botnaru, D. V. On c-reflexive subcategories. (Russian) (83\cdot 18007)
Burmeister, Peter See Andréka, Hajnal, et al., (83\cdot 03036)
Burris, Stanley Remarks on reducts of varieties. (83\cdot 08016)

Németi, Istvan See Andréka, Hajnai; et al., (834:0306)
Wroński, Andrzej Quasivarietics of Heyting algebras (abstract). (834:06016)

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Carrega, Jean-Claude Exclusion d'algèbres. (English summary) [Exclusion of algebras]

Khazal, Reyadh R. Classes of universal algebras, their nonfactors and periodic rings. 836:06013

Lysenko, F. F. Birkhoff R-classes of algebraic systems. (Russian) 83;68013

Hagemand repres mn, Joschim (with Herrmann, Christian) Arithmetical locally equational classes representation of partial functions. (83k:00007)

m, Christian See Hagemann, Joachim, (83k:00007)

10-XX NUMBER THEORY (Excluding 10Axx and 10Mxx, this classification does not distinguish work in the rational number fields from that in other algebraic number fields.)

10-01 Elementary exposition, textbooks

Bellman, Richard *Analytic number theory. 83c:10001
Burs, R. P. *A pathway into number theory. 82c:10001
Gluliano, Eurico An exploration in the realm of numbers. (Italian) 83d:10001
Hua, Luo Geng *Introduction to number theory. 83f:10001
Kristzel, Ekkehard *Zahlentheorie. (German) [Number theory] 83d:10002
Nelik, D. A. Rational approximations to pi. 83i:10001

ner, Wilfried (with Wiesenbauer, Johann) *Zahlentheorie. (German) [Number theory) #3h:10001

(Shia, Peter) See Hua, Luo Geng, 83:10001
Siegel, Carl Ludwig #Advanced analytic number theory. 83:s:10001
Vince, A. Period of a linear recurrence. 83k:10001
Wiesenbauer, Johann See Nobauer, Wilfried, 83k:10001

Dynkin, E. B. (with Uspenskii, V. A.) *Mathematische Unterhaltungen. (German) [Mathematical conversations] (83m:90006)
Fel'dman, N. I. ★Прибляжения алгебранческих чисся. (Russian) [Approximations of algebraic numbers] (83e:10045)

(Friedel, Peter) See Dynkin, E. B.; et al., (83m:00006)
Ireland, Keuneth F. (with Rosen, Michael I.) ★A classical introduction to modern number theory. (83g:12001)

number theory. (83g:12001)

Knebusch, Manfred (with Kolster, Manfred) *Wittrings. (83d:10024)

Kolster, Manfred See Knebusch, Manfred, (83d:10024)

Lam, T. Y. *The algebraic theory of quadratic forms. (83d:10022)

Roses, Michael I. See Ireland, Kenneth F., (83g:12001)

Selmer, Ernst S. Two popular problems in number theory. I. Changing coins.

(Norwegian. English summary) (83h:10034)

Siemon, Helmut *Anwendungen der elementaren Gruppentheorie in Zahlentheorie und Kombinatorik. (German) [Applications of elementary group theory in number theory and combinatorics] (83m:20003)

Uspenskii, V. A. See Dynkin, E. B. (83m:00006)
Zagier, Don Die ersten 50 Millionen Primzahlen. [The first 50 000 000 prime numbers] (B3e:10003)

10-02 Advanced exposition (research surveys, monographs, etc.)

Alladi, Krishuaswami (with Ramachandra, K.; Murty, Maruti Ram; Sivaramakrishnan, R.) Problem session. 83j:10001
Diamond, Harold G. Elementary methods in the study of the distribution of prime numbers. 83m:10002

Guy, Richard K. **Unsolved problems in number theory. 83h:10002 Murty, Maruti Ram See Alladi, Krishnaswami; et al., 83j:10001 Ramachandra, K. See Alladi, Krishnaswami; et al., 83j:10001

Schinzel, Andrzej Introduction to number theory in the years 1966-1978. (Polish)

Sivaramakrishnan, R. See Alladi, Krishnaswami; et al., 83j:10001
Williams, Hugh Cowie The influence of computers in the development of number theory.

secondary classifications:

Baker, Alam Diophantine analysis and transcendence theory. (83k:10063)
Fel'dman, N. I. ★Приближения агребравческих чисся. (Russian). [Approximations of algebraic numbers] (83e:10045)
Györy, Kálmán ★Résultats effectifs sur la représentation des entiers par des formes

décomposables. (French) [Effective results on the representation of integers by

decomposable forms (83c:10021)

Kritzel, Ekkehard *Zahlentheorie. (German) [Number theory] (83d:10002)

Rohlfs, Jürgen Über Summen von zwei Quadraten. [On sums of two squares]
(83m:10086)

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Waldschmidt, Michel ★Transcendence methods. (#3a:16068)

10-03 Historical (must also be assigned at least one classification number from Section 01)

Wynn, Peter The work of E. B. Christoffel on the theory of continued fractions. 83k-10002

secondary classifications:

hmakova, I. G. The composition of quadratic forms in the mathematics of the XIII-XVI centuries. (Russian) (83e:01013)

(with Slavutin, E. I.; Rozenfel'd, B. A.) The Arabic version of Diophantus'

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Arithmetic of algebraic curves from Diophantus to Poincaré. (French and Russian summaries) (83m:01005)

neimiki, Claude The long history of continued fractions and Padé approximants.

ums, Carl Friedrich) See Merzhach, Uta C., (83h:01034)
rwka, Edmund 90 Jahre Geometrie der Zahlen. [90 years of the geometry of numbers]
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(Kaprekar, D. R.) See Mohanty, S. P., (83f:91044)

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Merzhach, Uta C. An early version of Gauss's Disquisitiones arithmeticae. (83b:01034)

Mohanty, S. P. D. R. Kaprekar—a life-long devotee of mathematics. (83f:91044)

Pady, Donald S. (with Kline, Laura S.) Finger counting and the identification of James
VI's secret agents. (83e:01021)

Pedrazzi, Maino A curious table of classes of numbers congruent mod 90. (Italian)

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Romentos)

Romentos, R. A. Ramanujan's manuscripts and notebooks. (83k:01059)

Romenfe'd, B. A. See Bashmakova, I. G.; et al., (83m:01009)

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Taussky, Olga History of sums of squares in algebra. (83d:01051)

Zhuk, N. V. A problem of Pierre Fermat. (Russian. English summary) (83d:01034)

graphy: Kaprekar, D. R. See Mohanty, S. P., (83f:01044)

10-04 Explicit machine computation and programs (not the theory of computation or programming)

Schoose, Rosald Writing a number as the sum of two squares: a new someon.

324:19003
insel, Lionel E., Jr. (with Jones, Michael T.) Finding pluperfect digital invariants: techniques, results and observations. 236:19001
unkin, M. A. Complexity questions in number theory. (Russian. English summary)

ov, N. M. A mathematical machine that is oriented toward the study of

Diophantine equations. II. (Russian) 83;10002 stin, Gary B. (with McLaughlin, Philip B., Jr.) Six new factors of Fermat numbers.

populos, Costas S. Analysis of an algorithm for composition of binary quadratic forms. 83k:10003
nes, Michael T. See Deimel, Lionel E., Jr., 83k:10001
renerup, Peter (with Matula, David W.) An integrated rational arithmetic unit. (See 83k:69007)
nstra, H. W., Jr. Primality testing algorithms (after Adleman, Rumely and Williams).

R3g:10002
Matula, David W. See Kornerup, Peter, (See 83k:68007)
McLaughlin, Philip B., Jr. See Gostin, Gary B., 83c:10003
(Richards, Ian) See Wolf, Jack Keil, 83j:10003

Schnorr, C.-P. Refined analysis and improvements on some factoring algorithms. 83g:10003

Shen, Zhong Qi See Sun, Qi; et al., 83m:10003
Sun, Qi (with Zheng, De Xun; Shen, Zhong Qi) *Kuaisu shulun bianhuan. (Chinese)
[Fast number-theoretic transforms] 83m:10003
Wolf, Jack Keil Letter to the editors: "The invisible prime factor" [Amer. Sci. 70 (1982), no. 2, 176-179; MR 83c:10007] by I. Richards. 83j:10003

Wolfart, Jürgen Primzahltests und Primfaktorzerlegung. [Primality tests and prime factorization] 83::10002

Xa, Li Zhi (with Zhu, Zi Qiang) On a class of iterative processes with global convergence. (Chinese. English summary) 838:10002
Zagier, Doan Die ersten 50 Millionen Primzahlen. [The first 50 000 000 prime numbers] 82e:10003

Zheng, De Xun See Sun, Qi; et al., 83m:10003 Zhu, Zi Qiang See Xu, Li Zhi, 83f:10002

secondary classifications:

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Table errata: "New primality criteria and factorizations of 2"±1" [Math. Comp. 29 (1975), 620-647; MR 52 #5546] by the author, D. H. Lehmer and J. L.

Selfridge. (83):10010)

Fenner, T. I. (with Loizou, G.) An analysis of two related loop-free algorithms for generating integer partitions. (830:68020)

Hilliker, David Lee An algorithm for solving a certain class of Diophantine equations. I.

Jeger, M. Zur Behandlung des euklidischen Algorithmus bei Polynomen mit einem programmaierbaren Taschen-Rechner. [On the treatment of the Euclidean algorithm in polynomials with a programmable pocket calculator] (83k:12001a)

Zur Behandlung des euklidischen Algorithmus bei Polynomen mit einem programmierbaren Taschen-Rechner. II. [On the treatment of the Euclidean algorithm in polynomials with a programmable pocket calculator. II] (83k:12001b)

Kerimov, M. K. Methods for calculating the Riemann zeta function and some of its generalizations. (Russian) (83e:10072)

generalizations. (Russian) (83a:18072)
Lagarias, J. C. Worst-case complexity bounds for algorithms in the theory of integral quadratic forms. (83e:99112)
Lehmann, Daniel J. On primality tests. (83k:18086)
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Loizou, G. See Fenner, T. L. (83k:68020)

Loizou, G. See Fenner, T. L. (83k:68020)

Norris, Michael J. (with Simmons, Gustavus J.) Algorithms for high-speed modular arithmetic. (83d:68010)

Pollard, John M. See Brent, Richard P., (83h:10014)

Pumerance, Carl Recent developments in primality testing. (83h:10015)

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(Selfridge, J. L.) See Brellhart, John, (83h:10010)

Simmons, Gustavus J. See Norris, Michael J., (83d:68010)

Tanaka, Minoru A numerical investigation on cumulative sum of the Liouville function. (83h:10010)

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(83c:10002)

Winter, D. T. See Brust, Richard P.; et al., (83n:10067)

Yorlnaga, Masataka Numerical investigations of the Carmichael function and C4-numbers. (83h:10063)

10-06 Proceedings, conferences, etc.

(Alladi, Krishnaswami) See Number theory, 83g:10004
(Jagannathan, R.) See Proceedings: Conference on Number Theory, 83a:16002
(Knopp, Marvin L) See Analytic number theory, 83a:16004
(Taussky, Olga) See Ternary quadratic forms and norms, 83i:16003
Analytic number theory

*Analytic number theory (on exponential sums)

*Analytic number theory (on exponential sums)

Analytic number theory (on exponential sums)

dytic number theory, mathematical analysis and their applications **Aналитический анализ и их приложения. (Russian) [Analytic number theory, mathematical analysis and their applications] 83f:10003

nogradov, I. M. See Analytic number theory, mathematical analysis and their applications, 83:10003

Conference:

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Number Theory See Proceedings: Conference on Number Theory, 83c:10001

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Analytic Number Theory (on Exponential Sums) See Analytic number theory (on

exponential sums), 83h:10003

Ternary quadratic forms and norms. *Ternary quadratic forms and norms. 83i:10003

10Axx Elementary number theory {For analogues in number fields, see 12A05.}

numer, Henri J. *Fast Fourier transform and convolution algorithms. (83e:65219)

10A05 Multiplicative structure of the integers (GCD, etc.)

Beck, Eugen Verallgemeinerung einer Identität von E. Lucas. [Generalization of an identity of E. Lucas] 83g:10005

Exhov, I. I. On some probabilistic problems associated with prime numbers. (Russian)

Grök, Wolfgang Eine Bemerkung zum Fundamentalsatz der Zahlentheorie. [A comment on the fundamental theorem of number theory] 831:10004

Iakin, A. L. Extended Binet forms for generalized quaternions of higher order. 831:10004

Joshi, S. R. On tests of divisibility. 83e:10004

yashi, Hiroshi On existence of infinitely many prime divisors in a given set. Rotkiewicz, Andrzej On Euler Lehmer pseudoprimes and strong Lehmer pseudoprimes with parameters L, Q in arithmetic progressions. 83k:10004

Wegener, Delano P. Primitive Pythagorean triples and the infinitude of primes.
83k:10005

secondary classifications:

Long, Calvin T. Some divisibility properties of Pascal's triangle. (83a:05013a)
Pascal's triangle modulo p. (83a:05013b)
Russell, A. M. Triangular displays of integers. (83c:10018)

10A10 Congruences, primitive roots

DeLeon, M. J. The congruence xⁿ ≡ a (mod m), where (n, φ(m)) = 1. 83k:10005
 Ecker, A. On primitive roots. 83j:10004
 Huxley, M. N. A note on polynomial congruences. 83e:10005
 Mays, Michael E. A note on Fibonacci primitive roots. 83j:10005
 Rockiewicz, Andrzej Arithmetical progressions formed from three different Euler pseudoprimes for the odd base a. 83b:10002
 Wagstaff, Samuel S., Jr. Pseudoprimes and a generalization of Artin's conjecture.

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secondary classifications:

hert, Karl Egil (wish Beck, István) Chinese rings. (83k:13008) slander, L. (with Tolimieri, R.; Winograd, S.) Hecke's theorem in quadratic reciprocity, finite nilpotent groups and the Cooley-Tukey algorithm. (83m:12003)

Beck, Istvim See Aubert, Karl Egil, (R3h:13006) Buhler, J. P. (with Crandall, R. E.; Penk, M. A.) Primes of the form $n!\pm 1$ and 2·3·5···p±1. (83æ10006)

shechtal, Peter Über den Rang gewisser zirkulanter Matrizen (zu Problem 764A). [On the rank of certain circulant matrices (Problem 764A)] (83h:15011)

Chalk, J. H. H. (with Smith, Robert Arnold) Sándor's theorem on polynomial congruences and Hensel's lemma. (834:12007)

Crandall, R. E. See Buller, J. P.; et al., (83c:10006)
Gaschiltz, Wolfgang Linear abgeschlossene Zahlenmengen. I. [Linearly closed number sets. I] (83m:10095)

Gessel, Ira Some congruences for Apéry numbers. (83±10012) Penk, M. A. See Buhler, J. P.; et al., (83c:10006) Smith, Robert Arnold See Chalk, J. H. H., (83d:12007)

Tolimieri, R. See Auslander, L.; et al., (83m:12003)
Wegener, Delano P. Primitive Pythagorean triples and the infinitude of primes. (83h:10005)

Winograd, S. See Auslander, L.; et al., (83m:12003)

10A15 Power residues, reciprocity

Baumert, L. D. (with Mills, W. H.; Ward, Robert L.) Uniform cyclotomy. 83:10005 Evans, Ronald J. Rational reciprocity laws. 83:10006 Goldschmidt, David M. Some amazing properties of the function $f(x) = x^2$. 83::10006 Hudson, Richard H. (with Williams, Kenneth S.) A new formulation of the law of octic reciprocity for primes $\equiv \pm 3 \pmod{8}$ and its consequences. 83::10005 Mills, W. H. See Baumert, L. D.; et al., 83::10005 Ward, Robert L. See Baumert, L. D.; et al., 83::10005 Williams, Kenneth S. See Hudson, Richard H., 83::10005

10A20 Number-theoretic functions, related numbers; inversion formulas

Abramovich, V. S. An analogue of the Euler function. (Russian) 83s:10065 Apostol, Tom M. (with Vu, Thiennu H.) Elementary proofs of Berndt's reciprocity laws.

Baum, John D. A number-theoretic sum. 83e:10006

Beck, Walter E. (with Najar, Rudolph M.) A lower bound for odd triperfects. 83m:10006

Cadogan, Charles C. (with Lowe, C. S.) On equivalence classes within equivalence classes of integers. 83h:10007

Calderón García, Catalina Some properties of the functions $\mu^a{}_k$ and $\phi^a{}_k$. (Spanish. English summary) 83k:16007

Davis, K. Joseph A generalization of the Dirichlet product. 83;10007

Freud, Róbert On sets characterizing additive arithmetical functions. I. 83d:10004a
On sets characterizing additive arithmetical functions. II. 83d:10004b

sjean, Carl C. An infinite set of recurrence formulae for the divisor su 83d:10005a

An infinite set of recurrence formulae for the divisor sums. II. 834:10005b Hagis, Peter, Jr. On the second largest prime divisor of an odd perfect number.

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Hudson, Richard H. On a conjecture of Emma Lehmer. 83e:10007

Jagamathan, R. On the use of matrix methods in certain number theoretic problems.

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Johnson, Kenneth R. A reciprocity law for Ramanujan sums. 83d:10006 Kendall, David G. The scale of perfection. 83d:10007

Krawczyk, Andrzej On some property of the function $\varphi(n)$. (Russian and Slovak

summaries 83a:10004

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Mauclaire, J.-L. (with Murata, Leo) On the regularity of arithmetic multiplicative functions. I. 83a:10005a

(with Murata, Leo) On the regularity of arithmetic multiplicative functions. II. (with Murata, Leo) On the regularity of arithmetic multiplicative functions. III.

83a:10005c

McKay, James H. (with Wang, Stuart Sui Sheng) The $v \times v$ (0, 1, -1)-circulant equation $AA^{T} = vI - J$. 83h:10008

Mercier, Armel Remarques sur les fonctions spécialement multiplicatives. [Remarks on specially multiplicative functions] 83k:10008

Murata, Leo On some fundamental relations among certain asymptotic densities.

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See also Mauchire, J.-L., 83a:10005

Najar, Rudolph M. See Beck, Walter E., 83m:10006
Porubský, Štefan On the probability that k generalized integers are relatively H-prime. 83j:10008

Pulatova, M. I. On some systems of linear operators connected with arithmetical

inversion formulas. 83±10008

Quesada Chaverri, Francisco Formulas which express number-theoretic functions without factorization into primes. (Spanish) 83±10009

Redmond, Don (with Sivaramakrishnan, R.) Some properties of specially multiplicative

functions. 83h:10009

Sivaramakrishana, R. On abstract Möbius inversion. 83d:10009

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Tanaka, Minoru A numerical investigation on cumulative sum of the Liouville function.

83h:10010

Thrimurthy, P. On the averages of the core divisors of a number. 83h:10011

Vu, Thiesmu H. See Apostol, Tom M., 83j:16006 Wang, Stuart Sui Shong See McKay, James H., 83h:10008

Anderson, Robert Joseph (with Stark, H. M.) Oscillation theorems. (Ethc10002)

Apostol, Tom M. (with Vu, Thiennu H.) Identities for sums of Dedekind type.
(Ethc10054)

Codech, Paolo On the almost-periodic behavior of the remainder term of a certain class of strongly multiplicative functions. (Italian. English summary) (83k:10096)

Fang, Kuang Wei Some identities of Dirichlet series relating with the Möbins function.

rdy, G. E. (with Subbarao, M. V.) Semi r-free and r-free integers—a unified approach.

(30k:10064)
Heath-Brown, D. R. A parity problem from sieve theory. (83k:10086)
Mercler, Armel Remarques sur la représentation de certaines séries de Dirichlet.
[Remarks on the representation of certain Dirichlet series] (83c:10009)
Posserance, Carl On the distribution of pseudoprimes. (83k:10009)
Stark, H. M. See Anderson, Robert Joseph. (83k:10082)
Subbarao, M. V. See Hardy, G. E., (83k:10084)
Vu, Thiemun H. See Apostol, Tom M., (83k:10054)
Wirning, Eduard Additive and completely additive functions with restricted growth.
(83k:10096)

Zagier, Don On the number of Markoff numbers below a given bound. (83k:10062)

10A21 Counting functions

Gronau, Hans-Dietrich O. F. (with Steffen, Günther) A problem of L system interest.

Posserance, Carl On the distribution of pseudoprimes. 83k:10009
A new lower bound for the pseudoprime counting function. 83k:10012
Steffen, Günther See Gronnu, Hams-Dietrich O. F., 83k:10004

Evans, Ronald J. (with Pulham, J. R.; Shechan, John) On the number of complete

subgraphs contained in certain graphs. (83e:98075)

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Huxley, M. N. A note on polynomial congruences. (83e:18005)

Kelly, Jerry S. The number of preference preorderings. (83d:90011)

McLarma, T. J. The numbers of polytypes in sheet allicates. (83m:52015)
Mintz, Donald J. 2, 3 sequence as binary mixture. (83d:05009)
Pulham, J. R. See Erans, Ronald J.; et al., (83c:05075)
Sheehan, John See Erans, Ronald J.; et al., (83c:05075)

10A22 Abstract theory of number-theoretic functions

Chao, Chong Yun Generalizations of theorems of Wilson, Fermat and Euler. 83k:10010 Mn, Shao Kui (with Shen, Bai Ying) Inverse functions of number-theoretic functions. I. (Chinese. English summary) 83g:10007

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econdary classifications:

Johnson, Kenneth R. A reciprocity law for Ramanujan sums. (83d:10006)

10A25 Elementary prime number theory, factorization

Ayouh, R. G. (with Chowla, S.) On Euler's polynomial. 83k:10013

allile, Robert (with Cormack, G.; Williams, Hugh Cowie) The problem of Sierpiński concerning k·2"+1. 83a:1006a (with Cormack, G.; Williams, Hugh Cowie) Corrigenda: "The problem of Sierpiński concerning k·2"+1" [Math. Comp. 37 (1981), no. 155, 229-231]. 83a:10006b

Bevis, Jean H. See Boal, Jan List, 43e:10009
Boal, Jan List (with Bevis, Jean H.) Permutable primes. 43e:10009
Boyd, David W. The asymptotic behaviour of the binomial circulant determinant.

nt, Richard P. (with Pollard, John M.) Factorization of the eighth Fermat number. 83b:10014

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2.3.5 ··· p±1. 8c:10006

Burke, John R. (with Webb, William A.) Asymptotic behavior of linear recurrences. 83e:10010

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Chowla, S. See Ayoub, R. G., R3h:10013
Cormack, G. See Baillie, Robert; et al., R3e:10006
Crandall, R. E. See Baillie, Robert; et al., R3e:10006
Faizlee, R. F. Two general criteria for m+1 primality of natural numbers. (Russian. Tajiki summary) R3e:10005
Higgins, Olga Another long string of primes. R3h:10005
(Lehmer, D. H.) See Brillhart, John, R3j:10010
Montgomery, Hugh L. (with Vaughan, R. C.) The distribution of squarefree numbers.
R3d:10010
Conductive Baided! More were large twin primer R10-10011

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Ondrejka, Rudolf More very large twin primes. 83k:10011
Penk, M. A. See Buhler, J. P.; et al., 83c:10006
Pollard, John M. See Brent, Richard P., 83k:10014
Pomerance, Carl Recent developments in primality testing. 83k:10015

Richards, Ian The invisible prime factor. 83c:10007 (Selfridge, J. L.) See Brillhart, John, 83j:10010 Smarandache, Florentin Gh. A function in the numb

Cristeia for a natural number to be prime. (Romanian) 83a:10007

Trigg, Charles W. A large prime quadruplet. 83b:10006

Vaughan, R. C. Ser Montgomery, Hugh L., 83d:10010

Webb, Williams A. See Burke, John R., 83e:10010

Williams, Hugh Cowie A p+1 method of factoring. 83b:10016

A class of primality tests for trinomials which includes the Lucas-Lehmer test. R3f-1000R

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secondary classifications:

Brylawski, Tom Finite prime-field characteristic sets for planar configurations.
(834:05029)

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dson, Richard H. (with Williams, Kenneth S.) A divisibility property of binomial coefficients viewed as an elementary sieve. (83i:05009)

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Loos, Rhiliper See Calmet, Jacques, (See 83k:68003)

McLaughlin, Philip B., Jr. See Gostin, Gary B., (83c:10003)

Narkiewicz, W. Numbers with all factorizations of the same length in a quadratic number field. (836:12004)

Pomerance, Carl A new lower bound for the pseudoprime counting function. (83h:10012) Schnorr, C.-P. Refined analysis and improvements on some factoring algorithms.

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Williams, Kenneth S. See Hudson, Richard H., (83i:05009)

Wolfart, Jürgen Primzahltests und Primfaktorzerlegung. [Primality tests and prime factorization] (83i:10002)

factorization] (83i:10002)

Zagier, Don Die ersten 50 Millionen Primzahlen. [The first 50 000 000 prime numbers]
(83e:1003)

Perfect numbers and imperfect mathematicians Perfect numbers and imperfect mathematicians. (Persian) (83:01049)

10A30 Algorithms and expansions; digital properties {For metric results, see 10K10.}

Bereková, Helena Sequences of powers of rational numbers. (Russian and Slovak summaries) 83d:10011

Gupta, Hansraj Multiscalar systems and distribution matrices. 834:10012 Hudson, Richard H. (with Winans, C. F.) A complete characterization of the decimal fractions that can be represented as $\Sigma 10^{-k(i+1)} F_{ai}$, where F_{ai} is the αi th Fibonacci number. 83d:10013

Kuipers, L. A property of the Fibonacci sequence (F_m) , $m=0,1,\cdots$. 83k:10012 Kullman, David E. Sums of powers of digits. 83a:10008 Lehmann, Daniel J. On primality tests. 83i:10006

Lehmann, Daniel J. On primality tests. 83i:10006
(Lehmer, D. H.) See Yates, Samuel, 83i:10014

Mercier, Armel Remarques sur la représentation de certaines séries de Dirichlet.

[Remarks on the representation of certain Dirichlet series] 83e:10009

Prodinger, Helmut Generalizing the sum of digits function. 83i:10009

Stolarsky, Kenneth B. The number of bits in a product of odd integers. 83e:10010

Trigg, Charles W. Consecutive-digit integers in bases less than ten. 83h:10017

Palindromic octagonal numerals. 83h:10018

Williams, Hugh Cowie Corrigendum: "Some primes with interesting digit patterns"

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Winans, C. F. See Hudson, Richard H., 83d:10013

Vates, Samuel *Repunits and repetends. 83k:10014

Zannier, U. On the distribution of self-numbers. 83k:10007

secondary classifications:

Bevis, Jean H. See Boal, Jan List, (83e:10009)

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Brik, V. A. See Kart-ser, M. A., (83a:60006)
Chachanashvili, A. R. See Khatskevich, V. Kh., (83d:94019a)

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Dixon, John D. Exact solution of linear equations using p-adic expansions. (83m:65025)

Gregory, Robert Todd See Rao, T. M., (See 83h:68007)

Kart-sev, M. A. (with Brik, V. A.) ★Вычислительные системы и спихропилая

арифметика. (Russian) [Computer systems and synchronous arithmetic] (83a:68008)

Khatskevich, V. Kh. (with Chachanashvili, A. R.) Some algorithms for performing basic

operations in nonpositional number systems. (Russian) (83d:94019a) (with Svanishvili, R. N.) On the question of parametric representation of nonpositional systems. (Russian) (83d:94019b)

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Matula, David W. Basic digit sets for radix representation. (83k:68017)

Panov, A. A. Element-wise means of a class of continued fractions. (Russian) (83c:10074) Rao, T. M. (with Gregory, Robert Todd) The conversion of Hensel codes to rational numbers. (See 83k:68007)

numbers. (See 83k:68007) Svanishvili, R. N. See Khatskevich, V. Kh., (83d:94019b)

10A32 Continued fractions (For approximation results, see 10F20; see also 30B70, 40A15.)

Churchhouse, Robert F. Continued fractions of the Rogers-Ramanujan type. 83j:10011 Fluch, Wolfgang Ein. Analogon zum Gauß-Kuzmin-Operator. [An analogue to the Gauss-Kuzmin operator] 83i:10008

Petho, Attila Simple continued fractions for the Fredholm numbers. 83k:16015 Radovici-Mirculescu, P. Diophantine equations without solutions. (Romanian) 83e::16007

Rieger, G. J. Über die Länge von Kettenbrüchen mit ungeraden Teile ennern. [On the gth of continued fractions with odd partial denominators] 83e:10011
Ein Heilbronn-Satz für Kettenbrüche mit ungeraden Teilnennern.
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Shallit, Jeffrey Explicit descriptions of some continued fractions. 83;10012 Shrader-Frechette, Maurice Modified Farey sequences and continued fractions 83k:10016

Tasoev, B. G. Properties of an arithmetical function. (Russian. English and Georgian summaries) 83a:10009

secondary classifications:

Andrews, George E. Ramanujan's "lost" notebook. I. Partial \$\textit{\textit{0}}\)-functions. (\$\textit{2}\)min 10034a)

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Brentjes, Arne J. A two-dimensional continued fraction algorithm for best

proximations with an application in cubic number fields. (83b:10037) ski, Claude The long history of continued fractions and Padé approximants.

Fowler, D. H. A generalization of the golden section. (83m:51001)

10A35 Recurrence sequences

son, Marjorie See Hoggatt, Verner E., Jr., 83c:10014 and 83m:10008 Borho, Walter Befreundete Zahlen: ein zweitausend Jahre altes Thema der elementaren Zahlentheorie. [Amicable numbers: a two thousand year old theme of elementary number theory] 83k:10017

de Bourère, Karel Fibonacci induced groups and their hierarchies. 83d:10014
Davison, J. L. Some remarks on Beatty-type sequences. 83a:10010
Geldenhuys, G. On the Fibonacci numbers minus one. 83c:10012
Gelden, Rable Simultaneous Tribonacci representations. 80c:10013
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On some arithmetical properties of Lucas and Lehmer numbers.

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Hoggatt, Verner E., Jr. (with Bicknell-Johnson, Marjorie) A matrix generation of Fibonacci identities for F_{2nk} . 38::10014 (with Bicknell-Johnson, Marjorie) Lexicographic ordering and Fibonacci representations. 83m:10008

Horadam, A. F. (with Shannon, A. G.) Irrational sequence-generated factors of integers. 83a:10011

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Kalman, Dan Generalized Fibonacci numbers by matrix methods. 83h:10009

Klarner, David A. The ubiquitous rational sequence. 83h:10007

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Kreid, Tadeusz Generalized Fibonacci sequence Krishna, H. V. Pythagorean pentids. 83c:10015

Mátyks, Ferenc On the common terms of second order linear recurrences. 83f:10010
McCarty, Carl P. A formula for Tribonacci numbers. 83h:10019
McHugh, Joseph Characterization of a sequence. 83k:10019

Mignotte, Maurice Une extension de théorème de Skolem-Mahler. (Italian summary)
[An extension of the Skolem-Mahler theorem] 83k:10020

Muwafi, Amin A. See Philippou, A. N., 83f:10011
Parnami, J. C. (with Shorey, T. N.) Subsequences of binary recursive sequences.

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Philippou, A. N. (with Muwafi, Amin A.) Waiting for the Kth consecutive success and the Fibonacci sequence of order K. 83f:10011

Prasad, K. C. A note on the Farey-Fibonacci sequence. 83h:10020

Prodinger, Helmut On the number of Fibonacci partitions of a set. 83g:10008

Robbins, Neville Fibonacci and Lucas numbers of the forms w²-1, w³±1. 83k:10021

Some identities and divisibility properties of linear second-order recursion ences. 83f:10012 Russell, David L. nation of second-order recurrence terms and their squares.

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Stewart, C. L. On divisors of terms of linear recurrence sequences. 83i:10010
Tijdeman, R. Multiplicities of binary recurrences. 83i:10014
Wilker, Peter A recursion formula with applications to algebra, number theory and

nbinatorics. 83k:10022

Wong, Fook Bun Ducci processes. 83k:10023
Wright, E. M. Corrigenda: "A quadratic recurrence of Faltung type" [Math. Proc. Cambridge Philos. Soc. 88 (1980), no. 2, 193–197; MR 81i:10016]. 83k:10024 Wulczyn, Gregory Formation of generalized F-L identities of the form $\sum_{r=1}^{n} r^{2} F_{kr+a}$.

83b:10008 Generalized Fibonacci-Lucas difference equations. 83c:10016
A generalized extension of some Fibonacci-Lucas identities to primitive unit identities. 83c:10017

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Cerasoli, Mauro Two identities between Bell polynomials and Fibonacci numbers.
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Dem'yanenko, V. A. Recurrence relations for coefficients of a modular curve. (Russian)

(83a:33002)

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An infinite set of recurrence formulae for the divisor sums. II. (834:10005b) Hirschhorn, Michael D. The Andrews formula for Fibonacci numbers. (83a:10014)

Hoffman, D. G. (with Klarner, David A.) Sets of integers closed under affine operators —the finite basis theorem. (83e:10080) Klarner, David A. See Hoffman, D. G., (83e:10080) Kuipers, L. A property of the Fibonacci sequence (F_m) , $m=0,1,\cdots$. (83k:10012)

McCarty, Carl P. Coin tossing and the r-bonacci numbers. (83e:85007)
Mendés France, Michel Paper folding, space-filling curves and Rudin-Shapiro sequences.
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stkiewicz, Andrzej On Euler Lehmer pseudoprimes and strong Lehmer pseudoprimes with parameters L, Q in arithmetic progressions. (83k:10004)

Schoen, Robert The Fibonacci sequence in successive partitions of a solden triangle. (83):51025)

v, G. N. Criterion of proportionality in landscape architecture. (Russian) (83k:92076)

10A40 Special numbers, sequences and polynomials (e.g. Bernoulli)

Bedocchi, Edmondo Sum of divisors in the ring of integers of the field $Q\sqrt{2}$. (Italian. English summary) 83m:10009

Berndt, Bruce C. (with Wilson, B. M.) Chapter 5 of Ramanujan's second notebook.

R3i:10011

Carlitz, L. Some remarks on the multiplication theorems for the Bernoulli and Euler polynomials. (Serbo-Croatian summary) 83b:10009

Cohen, Graeme L. The nonexistence of quasiperfect numbers of certain forms. 83h:10022 Edwards, A. W. F. Sums of powers of integers: a little of the history. 83e:10013 Garrison, Betty Consecutive integers for which n²+1 is composite. 83h:10023

Gessel, Ira Some congruences for Apery numbers. 83:10012
Győry, Kálmán (with Kiss, P.; Schinzel, Andrzej) On Lucas and Lehmer sequences and

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Kimberling, Clark Four composition identities for Chebyshev polynomials. 83h:10026 Almost arithmetic sequences and complementary systems. 83h:10025

Kiss, P. See Győry, Kálmán; et al., 83g:10009

Laban, Miloš M. Homogenization of a finite sequence of real numbers and its uniqueness. 83a:10015

nont, P. J. C. The number of Cayley integers of given norm. 83e:10014

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 Lehmer, D. H. Generalized Eulerian numbers. 83k:10026
 Ligh, Stere (with Jones, Pat) Generalized Fermat and Mersenne numbers. 83f:10015
 Mohanty, S. P. On a problem of S. J. Bezuszka and M. J. Kenney on cyclic difference of pairs of integers. 83k:10010
 Nagaraj, S. T. Oscillatory numbers. 83d:10015
 Official Address M. (with Richmond, J. Bruss) On the unimedality of come partition.

to, Andrew M. (with Richmond, L. Bruce) On the unimodality of some partition polynomials. 83h:10027

enboim, Paulo On the square factors of the numbers of Fermat and Ferentinou-Nicolacopoulou. 83f:10016

Richmond, L. Bruce See Odlyzko, Andrew M., 83h:10027
Russell, A. M. Triangular displays of integers. 83c:10018
Saito, Sadao (with Hayasaka, Takanori) Corrections to: "A perfect (s, n)-sequ used on the quadratic F(k,i)" [Res. Rep. Mijagi Tech. College No. 15 (1979), 201-205; MR 80f: 10013] and "A perfect (s, n)-sequence based on F(k, i)" [ibid. No. 14 (1977), 101-108; MR 58 # 10706]. 83a: 10016

Schinzel, Andrzej See Györy, Kálmán; et al., 83g:10009 Schram, John Michael An 18-term top-down recursively prime sequence. 83h:10028 ni, Katsumi (with Yokoyama, Sayoko) An application of p-adic convolutions. 83m: 10011

Snyder, Chip Kummer congruences for the coefficients of Hurwitz series. 83d:10016
Stevens, Harlan Arithmetic properties of the menage polynomials. 83m:10012
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Trigg, Charles W. 9 and 10 distinct digits in triangular numbers. 83b:10011 Ugrin-Sparac, D. Some properties of numbers M, N and L. (Serbo-Croatian summary) 83c:10019

Wagstaff, Samuel S., Jr. Iterating the product of shifted digits. 83b:10012 Williams, Kenneth S. See Hudson, Richard H., 83b:10024 Wilson, B. M. See Berndt, Bruce C., 83i:10011

Wojcik, J. Contributions to the theory of Kummer extensions. 83e:10015 On the composite Lehmer numbers with prime indices. III. 83m:10013 Woods, Dale (with Huenemann, Joel) Larger Carmichael numbers. 83f:10017 Yokoyama, Sayoko See Shiratani, Katsumi, 83m:10011

secondary classifications:

Agrawal, B. D. (with Prasad, Jagadamba) Extension of the Bernoulli numbers and

polynomials. (83k:33026)
Brookfield, J. F. Y. Interspersed repetitive DNA sequences are unlikely to be parasitic. (83e:92032)

imel, Lionel E., Jr. (with Jones, Michael T.) Finding pluperfect digital invariants: techniques, results and observations. (83b:10001)

narmissien, Jacques Un analogue des congruences de Kummer pour les φ-nombres d'Euler. (English summary) [An analogue of the Kummer congruences for the φ-Euler numbers] (83k-85007)

eman, John M. (with Hoffman, Frederick) A semigroup and Gaussian polynomials.

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Greene, Daniel H. (with Knuth, Donald E.) *Mathematics for the analysis of algorithms. (83:e68045)

Gupta, Hansraj The binary system and distribution matrices. (83:e8908)

Hoffman, Frederick See Freeman, John M., (83k:20070)

Horsdam, A. F. (with Shannon, A. G.) Irrational sequence-generated factors of integers. (R3a:10011)

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Jones, Michael T. See Deimel, Lionel E., Jr., (83b:10001)
Knuth, Donald E. See Greene, Daniel H., (83c:60045)
Koblitz, Neal L. On Carlite's e-Bernoulli numbers. (83b:12017)
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Menon, V. V. The local central limit theorem for Stirling numbers of the second kind and an estimate for Bell numbers. (83g:05005)
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Mikola, Millan The Lucas number as the number of spanning trees. (Slovak. English,
German and Russian summaries) (83mc95050)

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Milne, Sephern C. Restricted growth functions, rank row matchings of partition lattices, and q-Striling numbers. (#3c:05012)

Prasad, Jagadamba See Agrawal, B. D., (#3k:33026)

Rai, B. K. See Singh, Surya Narain, (#3g:33010)

Segal, Sanford L. *Nine introductions in complex analysis. (#3k:30001)

mon, A. G. See Horsdam, A. F., (83α:10011) pnon, R. J. On a conjecture of R. L. Graham. (83j:10062) ph, S. D. (with Singh, Surya Narain) On Eulerian polynomials (φ_i(x,ξ)). (Hindi. mary) (Eli-13000)

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Ser also Singh, S. D., (83i:33008) Snyder, Chip A concept of Bernoulli numbers in algebraic function fields. II. (83e:12009)
Thakare, Nimbakrishna Geoeralization of Bernoulli, Euler numbers and related

polynomials. (Italian summary) (83m:05009) ng, Chung Lie (with Wang, Xing Hua) Refinements of the Mathieu inequality. (Chinese English summary) (83j:26017)

See Wang, Chung Lie, (83j:26017) ing, Xing Hua el *Repunits and repetends. (83k:10014) Vates, Sar

10A45 Partitions

Alter, Ronald Computations and generalizations on a remark of Ramanujan. 83g:10010
Andrews, George E. The Rogers-Ramanujan reciprocal and Mine's partition function.

Colman, W. J. A. The number of partitions of the integer N into M nonzero positive integers. 83h:10029

Costello, Patrick J. Density problems involving p,(n). 83e:10016

Evans, Ronald J. On additive partitions of sets of positive integers. 83m:10014 Everett, C. J. See Stein, P. R., 83a:10018

obert D. Identities for certain partition functions and their differences. 83c:16020 Gordon, Basil (with Hughes, Kimball Newton) Ramanujan congruences for q(n).

83i:10013

Hughes, Kimball Newton See Gordon, Basil, 83:10013
Kirdar, M. S. (with Skyrme, T. H. R.) On an identity relating to partitions and repetitions of parts. 83e:10017

siel, Wayne L. Representations of every integer as the difference of powerful numbers 83f:10018

Milne, Stephen C. A generalization of Andrews' reduction formula for the Rogers -Selberg functions. 83m:10015

Rogers, D. G. Triangular arrays associated with some partitions. 83b:10013 Selmer, Ernst S. Two popular problems in number theory. II. The pos

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Skyrme, T. H. R. See Kirdar, M. S., 80e:10017
Stechkin, B. S. Extremal properties of number partitions. (Russian) 83k:10014
Stein, P. R. (with Everett, C. J.) On the properties of a new classification of partitions

into at most three parts. 83a:10018

Andrews, George E. Ramanujan's "lost" notebook. I. Partial 6-functions. (83m:10034a)
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Multiple q-series identities. (83h:10090)

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m A. A simple derivation of Jacobi's four-sq pare formula. (83h:10088)

Felingold, Alex Jay (with Lepowsky, James) The Weyl-Kac character formula and power series identities. (83a:17015)

Fenner, T. I. (with Loizou, G.) An analysis of two related loop-free algorithms for generating integer partitions. (83b:68020)

Gardiner, Tony Stamps, coins and beer. (83a:18021)

Kac, Victor Infinite-dimensional algebras, Dedekind's n-function, classical Möbius

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An elucidation of: "Infinite-dimensional algebras, Dedekind's \(\phi\) function, classical M\(\text{objus}\) function and the very strange formula". \(E_8^{(1)}\) and the cube root of the modular invariant \(f\). (83a:17014b)

Lepowsky, James See Feingold, Alex Jay, (83a:17015)

Lindquist, Norman (with Sierksma, Gerard) Extensions of set partitions. (83a:05020) Lolzou, G. See Fenner, T. L., (83b:05020)
Muwafi, Amia A. A recursion-type formula for some partitions. (83a:05013)
Prodinger, Helmut On the number of partitions of $\{1, \dots, n\}$ into two sets of equal cardinalities and equal sums. (83k:05011)
Rawlings, Don The (q, r)-Simon Newcomb problem. (83k:05009)
Slierksma, Gerard See Lindquist, Norman, (83a:05020)
Vaidya, A. M. Representing integers as sums of two relatively prime composite integers. (83a:10071)

10A50 Combinatorial number theory

secondary classifications:

Erdis, Paul Some applications of graph theory and combinatorial methods to number theory and geometry. (83g:05001)

Weisman, Carl S. A divisibility property of binomial coefficients. (83h:05005)

10A99 None of the above, but in this section

Bihm, Corrado (with Sontacchi, Giovanna) On the existence of cycles of given length in es like $x_{n+1} = x_n/2$ if x_n even, and $x_{n+1} = 3x_n + 1$ otherwise. (Italian ry) 83k:10030

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combinatorial problems. (83h:90063)
[ijvestijn, A. J. W. (with Federico, P. J.; Leeuw, P.) Compound perfect squares.
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Hofmeister, Gerd Linear Diophantine problems. (83c:10024a)

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Khatskevich, V. Kh. On the solution of integer linear optimization problems in residual classes. (Russian) (83j:90062)

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Arkhipov, G. I. (with Karatsuba, A. A.) Local representation of zero by a form. (Russian) (83e:19028)

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Katz, Nicholas M. Monodromy of families of curves: applications of some results of Davenport-Lewis. (834:14012)

Lagarias, J. C. A complement to Ridout's p-adic generalization of the Thue-Siegel-Roth theorem. (83k:10073)

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Schiuzel, Andrzej Families of curves having each an integer point. (83k:12003)

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é On the Hurwitz problem over an arbitrary field. I. 83b:10020 sen, J. K. (with Pfister, Albrecht) Quadratische Formen über affinen Algebren und ein algebraischer Beweis des Satzes von Borsuk-Ulam. [Quadratic forms over affine

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Parimals, Raman Cancellation of quadratic forms over principal ideal domains.

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Adler, Allan Some integral representations of $PSL_2(F_p)$ and their applications. (83g:14019)

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shida, Masaaki Volume formula for certain discrete reflection groups in PU(2, 1). (83£32037)

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Hlawka, Edmund 90 Jahre Geometrie der Zahlen. [90 years of the geometry of numbers] 83a:10051

10E05 Lattices and convex bodies [See also 10J25.]

er, Peter M. (with Ramharter, Gerhard) Beiträge zum Umkehrproblem für den Minkowskischen Linearformensatz. [Contributions to the problem of inverting Minkowski's theorem on linear forms] 83m:10046

wer Zur Gitterpunktanzahl im Simplex. [Number of lattice points in a simplex] 83e:10040

Hossain, Md. Fazlee Lattice tetrahedra. (Bengali summary) 83c:10039
Ramharter, Gerhard See Gruber, Peter M., 83m:10046
Uhrin, Béla On a generalization of Minkowski's convex body theorem. 83f:10035

secondary classifications:

Kotlyar, B. D. A method for calculating the number of lattice points. (Russian) (83b:10044)

Lax, Peter D. (with Phillips, Ralph S.) The asymptotic distribution of lattice points in

Euclidean and non-Euclidean spaces. (83j:10057)

Lenstra, A. K. Lattices and factorization of polynomials over algebraic number fields (extended abstract). (See 83k:68003)

Makai, Endre, Jr. On the thinnest nonseparable lattice of convex bodies. (83a:52016)
McMullen, P. (with Wills, J. M.) Minimal width and diameter of lattice-point-free convex bodies. (83d:52011)

convex bodies. (836:52011)

Perles, M. A. See Zaks, Joseph; et al., (83d:52012)

Phillips, Ralph S. See Lax, Peter D., (83):10057)

Ryshkov, S. S. (with Shushbaev, S. Sh.) Construction of an L-partition for the second perfect lattice. (Russian) (83c:10042)

baev, S. Sh. See Ryshkov, S. S., (83c:10042)

Wills, J. M. See McMullen, P., (83d:52011) and Zaks, Joseph; et al., (83d:52012) Zaks, Joseph (with Perles, M. A.; Wills, J. M.) On lattice polytopes having interior lattice points. (834:52012)

10E10 Nonconvex hodies

10E15 Products of linear forms

Bakiev, K. B. An upper bound for the product of inhomogeneous linear forms for lattices with a small homogeneous minimum. (Russian) 83e:10041
Skabenko, B. F. On Minkowski's conjecture for large n. (Russian) 83i:10041
Woods, A. C. The asymmetric product of three inhomogeneous linear forms. 83e:10052

secondary classifications

Mukhsinov, Kh. Kh. Estimates in the inhomogeneous Minkowski conjecture for small dimensions. (Russian) (83a:10055)

10E20 Minima of forms [See also 10C25.]

rinimum of indefinite quadratic Hans-Gill, R. J. (with Raka, Madhu) Inhomoger forms in five variables of type (3,2) or (2,3): a soogecture of Watson. 80:e10040
(with Raka, Madhu) Positive values of inhomogeneous quinary quadratic forms of type (4, 1). 83a:10053

Some recent results on positive values of nonh forms. 83k:10061

forms. 83k:10061
ackson, T. H. One-sided inequalities for ternary forms. I. 83e:10041
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of inhomogeneous linear forms for small dimensions. (Russian) 83a:10034
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Ramharter, Gerhard Über ein Problem von Mordell in der Geometrie der Zahlen. (English summary) [On a problem of Mordell in the geometry of numbers] 83a:10056 Trenerry, D. W. A class of @-extreme Minkowski-reduced forms. 83m:10047

secondary classifications:

Ash, Avner On the existence of entactic forms. (83s:10034)

Duggal, Meenakshi (with Luthar, I. S.) Transference theorems in completions of A-fields of nonzero characteristic. (83e:10051)

Lagarias, J. C. Worst-case complexity bounds for algorithms in the theory of integral fratic forms. (83e:90112)

Luthar, I. S. See Duggal, Moe nkshi. (83c:10051)

10E25 Quadratic forms (reduction, extreme forms, etc.) [See also 10C05.]

Barnes, E. S. (with Trenerry, D. W.) The minimum determinant of Minkowski-reduced nary quadratic forms. 83h:10068
G. On an extremal property of Minkowski-reduced frames. (Russian) 83e:10042

Csóka, G. Narzullaev, Kh. N. Isolation theorems for DOTU-matrices. (Russian) 83f:10036

Peters, Meinhard Exceptions of integral quadratic forms. 83a:10057
Skubenko, B. F. Isolation theorem for decomposable forms of totally real algebraic er fields of degree n>3. (Russian) 83j:10036

Trenerry, D. W. See Barnes, E. S., 83h:10068

secondary classifications:

Belova, N. N. (with Malyshev, A. V.) Ergodic properties of lattice points on ellipsoids of genus $\mathfrak{G}[\Omega,1]$. (Russian) (83a:16065)

Earnest, A. G. Partitionings of a genus of quadratic forms. (#3f:10026) Malyshev, A. V. See Belova, N. N., (#3s:10085)

10E30 Lattice packing and covering [See also 05B40, 52A45.]

Horváth, Jenő Narrow latticed packing of unit balls in the space En. (Russian) 83s:16058 theznik, Gennady An equation in abelian groups and multiple lattice tilings of n-dimensional space. 83m:10048

Ryshkov, S. S. (with Shushbaev, S. Sh.) Construction of an L-partition for the second perfect lattice. (Russian) 83c:16042

haev, S. Sh. See Ryshkov, S. S., 83e:10042

secondary classifications:

Katsman, G. L. Bounds on volume of linear codes with unequal information-symbol protection. (83e:94049)

Sidel'nikov, V. M. Extremal polynomials used in bounds of code volume. (83e:94068) Shame, N. J. A. Recent bounds for codes, sphere packings and related problems obtained by linear programming and other methods. (83m:05047)

10E35 Mean value theorems

10E40 Transfer theorems

10E45 Automorphism groups of lattices [See also 10C30.]

10E99 None of the above, but in this section

Kombis, János (with Pintz, János; Szemerédi, Endre) A lower bound for Heilbronn's problem. 83i:10042

Pintz, János See Komlós, János; et al., 83:10042 Szemerédi, Endre See Komlós, János; et al., 83:10042

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secondary classifications:

Asimov, V. M. Lattice motions of a Euclidean plane. (Russian) (83c:60014) yaganova, M. I. Distribution of prime vectors in integer lattices. (Russian) (83b:10054)

10Fxx Diophantine approximation [See also 10K15.]

10F05 Approximation to one number

Cheng, Hsueh Cheng (with Pollington, Andrew) A result from Diophantine approximation which has applications in economics. 83a:10059

Chadnovsky, Gregory V. Approximation rationnelles de certains irrationnels cubiques. (English summary) [Rational approximations to some cubic irrationalities] 83m:10049

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Shopov, Pet'r P. A classification of irrational numbers by approximation and it application in the metric theory of continued fractions. (Russian) 83f:16037

Baker, Roger C. Cubic Diophantine inequalities. (83):10018)
Beukers, F. On the generalized Ramanujan-Nagell equation. I. (83s:10028a)
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Riederle, Max Short proofs of theorems of Lekkerkerker and Ballieu. (83m:10055)

10F10 Simultaneous approximation

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Gartner, Roswitha Zur Geometrie des Jacobi-Perron Algorithmus. [On the geometry of the Jacobi-Perron algorithm] 83m:10050

Jurkat, W. B. (with Kratz, W.; Peyerimhoff, Alexander) On best two-dimensional Dirichlet-approximations and their algorithmic calculation. 83e:10043

Kopetzky, Hans Günther *Diophantische Approximationen auf Kreisen und zyklische Minima von quadratischen Formen. (German) (Diophantine approximations on circles and zwife pricing pricing and provide pricing pricing and provide pricing prici and cyclic minima on quadratic forms] 83f:10038

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Achanov, S. M. Simultaneous approximations of values of some entire functions. (Russian. English summary) 83a:10061

Nowak, Werner-Georg A note on simultaneous Diophantine approximation. 83a:10062 Peyerimhoff, Alexander See Jurkat, W. B.; et al., 83e:10043

elev, A. A. Simultaneous approximations of exponentials by elements of the field Q1. (Russian) 83b:10035

withheer, Peter Un raffinement du théorème de Dirichlet sur l'approximation diophantienne. (English summary) [A refinement of Dirichlet's theorem on Diophantine approximation] 83b:10036 infinen, K. On the arithmetic properties of certain values of the exponential function.

secondary classifications:

Pitmun, Jane Pairs of diagonal inequalities. (83f:10024)

Reich, Axel Dirichletsche Reihen auf arithmetischen Progressionen. (English summary)

[Dirichlet series on arithmetic progressions] (83m:30005)

Skriganov, M. M. Structure of the spectrum of a two-dimensional Schrödinger operator with periodic potential and some arithmetic properties of two-dimensional lattices. (Russian) (83m:35114)

Yu, Kun Rul A note on a problem of Baker in metrical number theory. (83):10060)

10F15 Nonhomogeneous approximation

esoraitiene, R. Some Diophantine approximations. II. (Russian. English and Lithuanian summaries) 83a:10064

secondary classifications:

Mason, R. C. On Thue's equation over function fields. (83a:10024)

10F20 Continued fractions and generalizations [See also 10A32, 10K10.]

Arne J. *Multidimensional continued fraction algorithms. 83b:10038 A two-dimensional continued fraction algorithm for best approximations with an dication in cubic number fields. 83b:10037

application in cubic num

application in cubic number fields. 83b:10037
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Dubols, Eugène (with Rhin, Georges) Meilleures approximations d'une forme linéaire cubique. [Best approximations of a cubic linear form] 83f:10039
Pisot, Charles Dèveloppement en algorithme de Jacobi de certains couples d'irrationnelles liés à des fonctions de Bessel. [Expansion by the Jacobi algorithm of certain pairs of irrationals related to Bessel functions] 83e:10044
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secondary classifications:

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Boyanov, Borislav D. A generalization of the Markov inequality. (Russian) (83d:41016) Gärtner, Roswitha Zur Geometrie des Jacobi-Perron Algorithmus. [On the geometry of the Jacobi-Perron algorithm] (83m:10050)

tetzky, Hans Gönther *Diophantische Approximationen auf Kreisen und zyklische Minima von quadratischen Formen. (German) [Diophantine approximations on circles

and cyclic minima on quadratic forms] (83:10038)

Laohakosol, Vichian A counterexample to Schmidt's conjecture. (83g:10025)

Pethò, Attila Simple continued fractions for the Fredholm numbers. (83k:10015)

10F25 Approximation to algebraic numbers

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Fel'dman, N. I. ★Прибляжения алтебражческих чисел. (Russian) [Approximations of algebraic numbers] 83e:10045

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m, John F. Approximations to real algebraic numbers by algebraic numbers of smaller degree. 83c:10044

secondary classifications:

Hinz, Jürgen G. Potenzfreie Werte von Polynomen in algebraischen Zahlkörpern. [Power-free values of polynomials in algebraic number fields] (83i:10059)

10F30 Approximation by numbers from a fixed field

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10F35 Irrationality and transcendence

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having algebraic Laurent coefficients. 82e:10047
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sma, A. (with Cijsouw, P. L.) Degree-free bounds for dependence relations. 83a:10065

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nbieri, Enrico On G-functions. 83e:10050

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Durand, Alain Approximations algébriques d'un nombre transcendant. (English summary) [Algebraic approximations of a transcendental number] 83k:10065

n Ordre de transcendance sur Q,. [Order of transcendence on Q,] 83a:10066

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Loxton, John H. (with Van der Poorten, Alfred J.) Arithmetic properties of the solutions

of a class of functional equations. 83:10046

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Masser, D. W. (with Wüstholz, Gisbert) Zero estimates on group varieties. I. 83d:10040 Matala-Aho, T. (with Väänänen, K.) On the arithmetic properties of certain values of one Gauss hypergeometric function. 83k:10066 Gauss hyperg

ce, Michel Paper folding, space-filling curves and Rudin-Shapiro sequences.

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Miller, William Von Transcendence measures by a method of Mahler. 83e:10048

Miller, William Von Transcendence measures by a method of Mahler. 83e:10048

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Riederle, Max Short proofs of theorems of Lekkerkerker and Ballieu. 83m:10055

Schlickewei, Hans Peter p-adic T-numbers do exist. 83e:10067

Vaaler, Jeffrey D. (with Van der Poorten, Alfred J.) Bounds for solutions of systems of linear equations. 83e:10050

linear equations. 83e:10050 Väänänen, K. See Matala-Aho, T., 83k:10066

Van der Poorten, Alfred J. Some wonderful formulas...an introduction to

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(with Wang, Lian Xiang) On explicit estimates for linear forms in the values of a class of E-functions. Sid-10041

Yanchenko, A. Ya. The measure of mutual transcendence of almost all pairs of p-adic numbers. (Russian. English summary) 83m:10056 (Yu, Kun Rui) See Xu, Guang Shan, 83c:10052

secondary classifications:

alnovsky, Gregory V. The degree of subvarieties containing "cubes" of group varieties. III. (834:10064)

ngular points on complex hypersurfaces and multidimensional Schwarz lem (83m-32002)

Approximation rationnelles de certains irrationnels cubiques. (English summary) tional approximations to some cubic irrationalities] (83m:10049)

ert Points entiers sur les courbes elliptiques. (English summary) [Integer points on elliptic curves] (83e:10025)

Győry, Kálmán *Résultats effectifs sur la représentation des entiers par des formes

décomposables. (French) [Effective results on the representation of integers by decomposable forms (83c:10021)

Langevin, M. Facteurs premiers d'entiers en progression integers in an arithmetical progression] (83h:10087) sion arithmétique. [Prime factors of

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s France, Michel Principe de la symétrie perturbée. [The principle of perturbed symmetry] (83a:10089)

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selev, A. A. Simultaneous approximations of exponentials by elements of the field Q₁.

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Turk, Jan Polynomial values and almost powers. (83h:10040)

Väänänen, K. On the arithmetic properties of the values of p-adic G-functions.

Wolfart, Jürgen Transzendente Zahlen als Fourierkoeffizienten von Heckes Modulformen. [Transcendental numbers as Fourier coefficients of Hecke modular forms] (83e:10035)

10F37 Independence results

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Korobov, A. N. Estimates of some linear forms. (Russian. English summary) 83e:10051 Masser, D. W. On quasiperiods of abelian functions with complex multiplication. R3i:10047

A note on Baker's theorem. 83c:10053

Matveev, E. M. Estimates of linear forms from the values of G-functions and their applications to the solution of Diophantine equations. (Russian) 83j:10038

Linear forms of the values of G-functions, and Diophantine equations. (Russian)

Philippon, Patrice Indépendance algébrique de valeurs de fonctions exponentielles p-adiques. [Algebraic independence of values of p-adic exponential functions] 83g:10027

Indépendance algébrique et variétés abéliennes. (English summary) [Algebraic

independence and abelian varieties] 83e:10054
Reyssat, Éric Un critère d'indépendance algébrique. [A criterion for algebraic independence| 83g:10026

Wang, Kai On a theorem of S. Chowla. 83m:10057
Wüstholz, Gisbert Sur l'analogue abélien du théorème de Lindemann. (English summary) [On the abelian analogue of Lindemann's theorem] 83j:10039

Zhu, Yao Chen Algebraic independence of the values of certain gap series at rational points. (Chinese) 83k:10067

secondary classifications:

niel Transcendence properties of abelian integrals. (83e:10047) Sous-groupes analytiques de variétés de groupe et théorème de Brumer. [Analytic subgroups of group manifolds and Brumer's theorem] (83c:19048)

Mason, R. C. On Thue's equation over function fields. (83a:19024)

Okada, Tadashige On an extension of a theorem of S. Chowla. (83b:10014)

Tijdeman, R. Multiplicities of binary recurrences. (83:19044)

Waldschmidt, Michel *Transcendence methods. (83a:19068)

10F40 Distribution modulo one [See also 10K05.]

ger C. On the distribution modulo 1 of the sequence $\alpha n^3 + \beta n^2 + \gamma n$. 834:10042

Backers, F. Fractional parts of powers of rationals. 83g:19028

Coquet, Jean Représentation des entiers naturels et suites uniformément équiréparti ary) [Representation of natural numbers and uniformly equidistributed ences] 83h:10071

Hlawka, Edmund Über einige Reihen, die mit den Vielfachen von Irrationalzahlen zusammenhängen. II. [On some series that are connected with the multiples of irrational numbers. II] 83e:19953

flyar, B. D. A method for calculating the number of lattice points. (Russian)

Li, De Lang On the uniform distribution of slowly growing sequences. (Chinese. English ary) 83k:10072

Liu, Ming Chit (with Tsang, Kai Man) On the distribution (mod 1) of polynomials of a prime variable. 834:10043

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powers of complex numbers] \$3a:10069 by, Robert F. Diophantische Approximation und Gleichverteilung in Oktaver [Diophantine approximation and uniform distribution in octaves] \$34:10044

[Diophantine approximation and uniform distribution in octaves] 836:10044

Tsang, Kai Man See Liu, Ming Chit, 836:10043

Waldschmidt, Michel Sur le produit des conjugués extérieurs au cercle unité d'un entier algébrique. (English summary) [On the product of the conjugates outaide the unit circle of an algebraic integer] 83e:10055

secondary classifications:

Baker, Roger C. Small fractional parts of the sequence ant. (834:10049)
Coquet, Jean Représentations lacunaires des entiers naturels. [Lacunary representations of the natural numbers] (83h:10092)

Pustyl'nikov, L. D. New estimates of Weyl sums and the remainder term in the law of distribution of fractional parts of a polynomial. (Russian) (83h:10065)
Romero, L. A. On the generation of uniform pseudorandom numbers. (Spanish)

10F45 Approximation in non-Archimedean valuations

Lagarias, J. C. A complement to Ridout's p-adic generalization of the Thue-Siegel-Roth theorem. 83k:10073

Lachakosol, Vichian (with Pitman, Jane) Applications of p-adic interpolation to

exponential polynomials and sums of powers. 83j:18049

Mathan, Bernard Quelques remarques sur la conjecture de Littlewood (en approximations diophantiennes simultanées). [Some remarks concerning Littlewood's conjecture (in simultaneous Diophantine appr jecture (in simultaneous Diophantine approximations)] 83e:10054 Quelques remarques sur la conjecture de Littlewood (en approximations phantiennes simultanées). [Some remarks on Littlewood's conjecture (in

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en, K. On the arithmetic properties of the values of p-adic G-functions. 83k:10074 **Zheludevich**, F. F. Diophantine approximations in $Q_p \times Q_q$. (Russian. English summary)

secondary classifications:

Escassut, Alain Ordre de transcendance sur Q,. [Order of transcendence on Q,] (83a:10066)

Schlickewei, Hans Peter p-adic T-numbers do exist. (83a:10067)

Schmidt, Wolfgang M. Polynomial solutions of $F(x, y) = z^n$. (83s:10027) Yanchenko, A. Ya. The measure of mutual transcendence of almost all numbers. (Russian. English summary) (83s:10056) cendence of almost all pairs of p-adic

10F99 None of the above, but in this section

Freiling, Chris An answer to a question of Schmidt on (α, β) games. 83j:10041 Osgood, Charles F. Nearly perfect systems and effective generalizations of Shidlovski's theorem 83e:10057

Srinivasan, Seshadri A note on |ap-ql. 83j:10642

secondary classifications:

Morikawa, Ryozo Disjointness of sequences $[\alpha_i n + \beta_i]$, i = 1, 2. (83m:10096)

10Gxx Trigonometric sums, exponential sums and character sums

10G05 Exponential sums

Arkhipov, G. I. (with Karatsuba, A. A.; Chubarikov, V. N.) Multiple trigonometric sums. 83j:10043

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Helversen-Pasotto, Anna Darstellungen von GL(3, F_q) und Gaußsche Summen.
[Representations of GL(3, F_q) and Gauss sums] 83m:10058

Jurkat, W. B. (with Van Horne, J. W.) On the central limit theorem for theta series.

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Karatsuba, A. A. See Arkhipov, G. L; et al., 83j:10043
Moser, Ján New estimates of short trigonometric sums. (Russian) 83m:10059
Ozeki, Michio On certain generalized Gaussian sums. 83j:10044
Rao, K. Nageswara (with Sivaramakrishnan, R.) Ramanujan's sum and its applications to some combinatorial problems. 83k:10045

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oley, Christop iulionis, A. (R3i:41005) pher On Waring's problem for two squares and three cubes. (83g:10012) The polynomials $L_n^{(k)}(s,x)$. (Russian. German and Lithuanian summaries)

Myerson, Gerald Period polynomials and Gauss sums for finite fields. (83e:10058)
Okada, Tadachige On an extension of a theorem of S. Chowla. (83b:10014)
Tuler, Randy On the linking number of a 2-bridge link. (83a:22014)
Vladimiros, V. S. The Diophantine moment problem and the Ising model. (Russian)
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10G10 Estimates on exponential sums

Allakov, I. See Israilov, M. I., 83j:10046
Gallagher, Patrick X. (with Ramsey, L. Thomas; Wells, Benjamin B.) Asymptotic evaluation of Gauss polynomials. 83k:10069

n, Glyn Trig tric sums over primes. I. 83j:10045

Israilov, M. I. (with Allakov, I.) An estimation of trigonometric sums by prime numbers

in an arithmetic progression. (Russian) 83j:10046

Kolesmik, G. On the estimation of multiple exponential sums. 83e:10056

Konyagin, S. V. On the Littlewood problem. (Russian) 83d:10045

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 Heath-Brown, D. R. An asymptotic series for the mean value of Dirichlet L-functions. (83c:10059)
 Katz, Nicholas M. Crystalline cohomology, Dieudonné modules, and Jacobi sums. (83c:10273)

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nachandra, K. On series integrals and continued fractions. I. (83d:30007) the symr

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applications of the Chebotarev density theorem] (83k:12011) mous distributions. (Russian. English and

Spilker, J. See Schwarz, Wolfgang, (83::10078)
Timofeev, N. M. Convergence to discontinuou
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Wallisz, Anna The number of integer solutions of second degree Diophantine equations of elliptic type. (Russian) (83e:10025)

10H26 Asymptotic results on counting functions for algebraic and topological structures

Graham, R. L. (with Li, Wen Ch'ing Winnie; Paul, Jerome L.) Monochromatic lines in partitions of Z". 83c:10065

Hinz, Jürgen G. Potenzfreie Werte von Polynomen in algebraischen Zahlkörpern. [Power-free values of polynomials in algebraic number fields] 83i:10059

Ivić, Aleksandar On the number of finite nonisomorphic abelian groups in short intervals. 83c:10066

ik, G. On the number of abelian groups of a given order. 83b:10055

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 Matthews, C. R. Counting points modulo p for some finitely generated subgroups of algebraic groups. 83c:10067
 Paul, Jerome L. See Graham, R. L.; et al., 83c:10065

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Iwaniec, Henryk Rosser's sieve—bilinear forms of the remainder terms—some ms. 83b:10056

Long, Rui Lin Weighted large sieve inequalities in compact groups and homogeneous spaces. (Chinese) 83d:10055

The weighted large sieve inequalities on compact groups and some homogeneous spaces. 83d:10056

Russa, Imre Z. On the small sieve. II. Sifting by composite numbers. 83j:10053

secondary classifications:

Baker, Roger C. Metric number theory and the large sieve. (83a:10086)
Pan, Cheng Dong A new mean value theorem and its applications. (83a:10077)

10H32 Applications of sieve methods

Heath-Brown, D. R. A parity problem from sieve theory. 83k:10086 Iwaniec, Hearyk On the Brun-Titchmarsh theorem. 83a:10082 Montgomery, Hugh L. Maximal variants of the large sieve. 83g:10033 Sarges, Heidrun (with Schaal, Werner) Least quadratic nonresidues in algebraic number fields. 83k:10087

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secondary classifications:

Egami, Shigeki Average version of Artin's conjecture in an algebraic number field.
(83b:12015)

Friedlander, John B. Seiberg's formula and Siegel's zero. (83b:10051)
Halberstam, Heini (with Heath-Brown, D. R.; Richert, H.-E.) Almost-primes in short intervals. (83a:10075)

Heath-Brown, D. R. See Halberstam, Heini; et al., (83a:10075) Hooley, Christopher On another sieve method and the numbers that are a sum of two hth Hooley, Christopher Or powers. (83k:10088)

powers. (83s:10066) Iwaniec, Henryk (with Laborde, M.) P_2 in short intervals. (French summary) (83e:10061) Laborde, M. See Iwaniec, Henryk, (83e:10061) Li, De Lang On the equation 4/n=1/x+1/y+1/z. (83e:10026) Richert, H.-E. See Halberstam, Heini; et al., (83a:10075)

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, Miriam (with Shapiro, Harold N.) On the denseness of arithmetic vectors. 83f:10046

Langevin, M. Facteurs premiers d'entiers en progression arithmétique. [Prime factors of integers in an arithmétical progression] 83h:10087
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Sarges, Heidrum (with Schaal, Werner) Least quadratic nonresidues in algebraic number fields. (83k:10087)
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10H40 Generalized primes and integers

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10H45 Almost-periodic number-theoretic functions [See also 10K35.]

Mauclaire, J.-L. Suites limite-périodiques et théorie des nombres. IV. [Limit-periodic sequences and number theory. IV] 83e:10067a

Suites limite-périodiques et théorie des nombres. V. [Limit-periodic sequences and number theory. V] 83e:10067b

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secondary classifications:

Indlekofer, Karl-Heinz Some remarks on almost-even and almost-periodic functions.

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Fang, Kuang Wei Some identities of Dirichlet series relating with the Möbius function. 83:10060

Smith, Robert Arnold The generalized divisor problem over arithmetic progressions.
83m:10085

secondary classifications:

an, R. (with Ramachandra, K.) On the zeros of a class of generalised Dirichlet series. VI. (83e:10060)

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Itasu, Seiichi Differentiability of Riemann's function. (83e:42006)

Lewin, Leonard *Polylogarithms and associated functions. (83b:33019)

Pomerance, Carl Some number-theoretic matching problems. (83a:10019)

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Tenenbaum, Gérald Lois de répartition des diviseurs. IV. (English summary)

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[Distribution laws for divisors. IV] (83a:10094c)

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10J05 Sums of squares

Desbrow, D. Sums of integer powers. 83j:10054

Ewell, John A. On the counting function for sums of two squares. 83e:10068

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Koval'chik, F. B. Some analogies of the Hardy-Littlewood problem and density methods.

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Ling, Chih Bing (with Wu, Ming Ching) On evaluation of planar and cubic lattice sums. 83::10061

Revoy, Philippe Sur les sommes de carrés dans un anneau. (English summary) [On the sums of squares in a ring] 83d:10058

Rohlfs, Jürgen Über Summen von zwei Quadraten. [On sums of two squares] 83m:10086
Singmaster, David Sums of squares and pyramidal numbers. 83j:10055
Small, Charles A simple proof of the four-squares theorem. 83d:10059
Wu, Ming Ching See Ling, Chih Bing, 83i:10061

secondary classifications:

Backhouse, Ronald Writing a number as the sum of two squares: a new solution. (834:10003)

Cur, Mireille Sommes de carrès et d'irréductibles dans $F_a[X]$. (English summary) [Sums

of squares and irreducibles in $\mathbb{F}_q[X]$ (33e:12014)

Efroymson, Gustave A. The Nash ring of a real surface. (83):14018)

Fomenko, O. M. See Golubeva, E. P., (83):10064)

Golubeva, E. P. (with Fomenko, O. M.) Distribution of lattice points of two-sheeted hyperboloids. (Russian) (83):10064)

nyperboloids. (Russian) (83:10064)
Lamont, P. J. C. The number of Cayley integers of given norm. (83e:10014)
Sulakvelidze, L. A. The number of representations of numbers by certain regular and semiregular ternary quadratic forms belonging to multiclass genera. (Russian) (83:10029)

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Hooley, Christopher On another sieve method and the numbers that are a sum of two hth powers. 83k:10088

Nathanson, Melvyn B. Waring's problem for sets of density zero. 83k:10089

secondary classifications:

me, Robert F. Representation of integers by sums of mixed powers. (83g:10011)

Dolan, S. W. On expressing numbers as the sum of two cubes. (834:10017)

Liu, Ming Chit Bounds for prime solutions of some diagonal equations. (834:10039)

Milne, J. S. Some estimates from étale cohomology. (834:14014)

10J10 Applications of Hardy-Littlewood method [See also 10B35.]

Dashkevich, A. M. On the representation of natural numbers in the form $n=p^k+\Sigma_{i=1}^np_i^{k_i}$. (Russian) 83j:10056
Polyakov, I. V. On the exceptional set of the sum of a prime number and a square of a whole number. (Russian) 83s:10063

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Baker, Roger C. Cubic Diophantine inequalities. (83):10018)
Gogishvili, G. P. A type of formula for the number of representations of numbers by positive quadratic forms. (Russian) (83):10050)

vizin, V. V. On the distribution of lattice points on hyperbolic surfaces of second

order. (Russian) (83a:10026)
osswald, Emil Arithmetic progress

Grosswald, Emil Arithmetic progressions that consist only of primes. (R3k:10081)

Koval'chik, F. B. Some analogies of the Hardy-Littlewood problem and density methods. (Russian) (834:10057)

Vepkhvadze, T. V. Eisenstein-Euler series of binary quadratic forms. (Russian) (R3h:10052)

Yao, Qi The exceptional set of Goldbach numbers in a short interval. (Chinese) (83h-10090

10J15 Additive questions involving primes

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Plaksin, V. A. Asymptotic formula for the number of solutions of an equation with primes. (Russian) 83c:10070

Polyakov, I. V. On the exceptional set of the sum of a prime and the square of an integer. (Russian) 83e:10069

Valdya, A. M. Representing integers as sums of two relatively prime composite integers.

83e:10071

Yao, Qi The exceptional set of Goldbach numbers in a short interval. (Chinese)

secondary classifications:

Mueller, Julia On the difference between consecutive primes. (R3e:10062)
Polyakov, I. V. On the exceptional set of the sum of a prime number and a square of a whole number. (Russian) (R3a:10083)

10J20 Analytic work on partitions [See also 10A45.]

Andrews, George E. Multiple q-series identities. 83h:10090

Ewell, John A. Completion of a Gaussian derivation. 83a:10004

Grunbaum, Klaus On the sum of the pth powers of the first n numbers. (Danish. English summary) 83:16049 hmond, L. Bruce (with Szekeres, George) Some formulas related to dilogarithms, the

nction and the Andrews-Gordon identities. 83h:10057

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Bolturaev, U. An additive problem with a growing number of terms with the index

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Jain, Vinod Kumar Certain transformations of basic hypergeometric series and their applications. (83k:33005)

10J25 Lattice points in large regions

Belova, N. N. (with Malyshev, A. V.) Ergodic properties of lattice points on ellipsoids of genus G[Ω, 1]. (Russian) 83a:10085

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Bérard, Pierre H. ★Lattice point problems and eigenvalue asymptotics. 83h:10058
Bykovskii, V. A. Asymptotic properties of lattice points (a₁, a₂) that satisfy the congruence a₁a₂ = l(q). (Russian) 83d:10060
Fomenko, O. M. See Golnbeva, E. P., 83i:10064
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Asymptotic distribution of integral binary forms of a fixed discriminant. (Russian) 83e:1007

Ismoilov, D. Primitive lattice points on the surface of an elliptic cone. (Russian)

Lax, Peter D. (with Phillips, Ralph S.) The asymptotic distribution of lattice points in Euclidean and non-Euclidean spaces. 83m:10083

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(with Phillips, Ralph S.) The asymptotic distribution of lattice points in Euclidean and non-Euclidean spaces. 83m:19069

(with Phillips, Ralph S.) The asymptotic distribution of lattice points in Euclidean and non-Euclidean spaces. 83j:19057

Malyshev, A. V. See Belova, N. N., 83c:19085

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Rosen, Kenneth H. Dedekind-Rademacher sums and lattice points in triangles and

rchenko, A. N. On the number of lattice points in a domain. (Russian) 83j:10058

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Clerc, Jean-Louis On the asymptotic behaviour of generalized Bessel functions. (83c:58078)

Dodziak, Josef Eigenvalues of the Laplacian and the heat equation. (83d:35125)

Fernandez, Dicesar Lass (with Mangeron, Dumitru Ion; Shestopal, A. F.; Shimemura,
E.) Contribution to the problem of the asymptotic behavior of the number of
eigenvalues. II. On the eigenvalues and eigenfunctions in a problem related to the
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(Russian. Romanian summary) (83d:35126)

Günther, Paul Poisson formula and estimations for the length spectrum of compact
hyperbolic space forms. (83i:58093)

Ivié, Aleksandar On the number of finite nonisomorphic abelian groups in short intervals.

Ivić, Aleksandar On the number of finite nonisomorphic abelian groups in short intervals.
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Hyar, B. D. The number of lattice points in a random set. (Russian) (langeron, Dumitru Ion See Fernandez, Dicesar Lass; et al., (83d:35126) (seestopal, A. F. See Fernandez, Dicesar Lass; et al., (83d:35126) (seesturandez, Dicesar Lass; et al., (83d:35126)

riganov, M. M. Structure of the spectrum of a two-dimensional Schrödinger operator with periodic potential and some arithmetic properties of two-dimensional lattices. (Russian) (83m:35114)

urnheer, Peter Zu einem hyperbolischen Gitterpunktproblem. [On a hyperbolic lattice point problem] (83s-58094) gis, Matthias Teilerprobleme in drei Dimensionen. [Divisor problems in three dimensions] (83a-10000) dimensions] (83a:10

10J99 None of the above, but in this section

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Paris, Richard On a generalisation of a result of Ramanujan connected with the

exponential series. (83b:33004)
hamond, L. Bruce (with Szekeres, George) Some formulas related to dilogarithms, the
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Ruzsa, Imre Z. The law of large numbers for additive functions. (83:10070) Szekeres, George See Richmond, L. Bruce, (83b:10057)

10Kxx Probabilistic theory; measure, dimension, etc.

10K05 Distribution modulo one [See also 10F40.]

Baker, Roger C. Metric number theory and the large sieve. 83a:10086

Borel, Jean-Pierre Répartition modulo 1 suivant la mesure de Dirac à l'origine. (English

summary) [Uniform distribution modulo I with respect to the Dirac measure at the origin] 83b:10061

Coquet, Jean Ensem

quet, Jean Ensembles normaux et équirépartition complète. [Normal sets and complete equidistribution] 83h:10091 (with Rhin, Georges; Toffin, Philippe) Représentations des entiers naturels et indépendance statistique. II. [Representations of natural numbers and statistical independence. II] 83e:10071b

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Dekking, F. M. (with Mendes France, Michel) Uniform distribution modulo one: a geometrical viewpoint. 83b:10062
 Deshouillers, J.-M. La repartition modulo 1 des puissances d'un élément dans F_q((X)). [Distribution modulo 1 of the powers of an élement in F_q((X))] 83ê:10061
 Goto, Kazuo (with Kano, Takeshi) On the Wiener-Schoenberg theorem for asymptotic distribution functions. 83b:10063

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Hansel, Georges (with Troallic, Jean-Pierre) Suites uniformément distribuées et suites bien distribuées; une approche combinatoire. (Italian summary) [Uniformly distributed sequences and well-distributed sequences; a combinatory approach] 83f:10050 Hellegouarch, Y. Scales. 83k:10052

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[On properties and applications of the s-discrepancy] #3m:10091
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of roots of unity. 83f:10051 mgen der s-Diskrepanz.

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Kuipers, L. (with Shiue, Jau Shyong) Uniform distribution of sequences in rings of integral quaternions. 83b:18064

Levin, M. B. On the complete uniform distribution of the fractional parts of the exponential function. (Russian. English summary) 83j:18059

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Nowak, Werner-Georg (with Tichy, Robert F.) Einige weitere Resultate in Analogic zu einem Gleichverteilungssatz von Koksma. (English summary) [Some further results in analogy to a theorem of Koksma on uniform distribution] 83b:10094

(with Tichy, Robert F.) Zur Verteilung mod 1 der Potenzen komplexer Zahlen

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 Pustyl'nikov, L. D. New estimates of Weyl sums and the remainder term in the law of distribution of fractional parts of a polynomial. (Russian) 83b:10065
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Zinterhof, P. (with Stegbuchner, H.) Trigonometrische Approximation mit

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Coquet, Jean Représentation des entiers naturels et suites uniformément équiréparties. (English summary) [Representation of natural numbers and uniformly equidistributed sequences] (83h:10071)

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Taschner, Rudolf J. Eine zahlentheoretische Methode zur Bestimmung von

Näherungslösungen einer Anfangswertaufgabe. [A number-theoretic method for the determination of approximate solutions of an initial value problem] (83e:65008a) Eine zahlenth oretische Methode zur Bestimmung von Näherungslösungen

nichtlinearer Gleichungssyteme. [A number-theoretic method for the determination of approximate solutions of nonlinear systems of equations] (83:e65008b) ler, Jeffrey D. Limit theorems for uniformly distributed p-adic sequences.

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Wagner, Gerold Note on irregularities of distribution. (83d:10066)

Wang, Yuan (with Fang, Kai Tai) A note on uniform distribution and experimental design. (83h:62109)

10K10 Algorithms and expansions [See also 10A30, 10F20.]

Deheuvels, Paul L'encadrement asymptotique des éléments de la série d'Engel d'un nombre reel. (English summary) [Asymptotic bounds of the elements of the Engel series of a real number] 83h:10095

Dekking, F. M. On the structure of self-generating sequences. 83e:10075

Dringo, L. (with Katai, I.) Some remarks concerning the sum of digits of integers. 83a:10091

Gilbert, William J. Fractal geometry derived from complex bases. 83m:10092

Jager, H. On the speed of convergence of the nearest integer continued fraction. 83k: 10094

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Nakada, Hitoshi Metrical theory for a class of continued fraction transformations and their natural extensions. 83k:10095

Panov, A. A. Element-wise means of a class of continued fractions. (Russian) 83c:10074
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m, Jon (with Keane, Michael) The visits to zero of some deterministic random walks. (83):28016)
line, W. D. L. Finite additivity and upper and lower distribution functions.

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ssis, D. (with Mehta, M. L.; Moussa, Pierre) Orthogonal polynomials on a family of Cantor sets and the problem of iterations of quadratic mappings. (83g-58038) inchard, F. Systèmes dynamiques topologiques associés à des automates récurrents. (English summary) [Topological dynamical systems associated with recurrent automata] (83c-68101)
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Chatterjee, Amitava See Kak, Suhhash C., (83f:94024)

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Harmonic properties of some arithmetical sequences. (83k:10102)
Dekking, F. M. Regularity and irregularity of sequences generated by automata.
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Fluch, Wolfgang Ein Analogon zum Gauß-Kuzmin-Operator. [An analogue to the Gauss-Kuzmin operator] (83k:10008)
Fomin, S. V. See Kornfel'd, I. P.; et al., (83a:28017)

Fomin, S. V. See Kornfel'd, I. P.; et al., (83a:28017)
Furstenberg, Harry Poincaré recurrence and number theory. (83d:18067)
Grassberger, P. On the Hausdorff dimension of fractal attractors. (83d:58063)
Harao, Masateru See Miyazima, Hiromi; et al., (83a:68067)
Kak, Subhash C. (with Chatterjee, Annitava) On decimal sequences. (83f:94024)
Keane, Michael See Aaronson, Jon. (83j:28016)
Kornfel'd, I. P. (with Sinal, Ya. G.; Fomin, S. V.) *Epropreseckas reopsis. (Russian) [Ergodic theory] (83a:28017)

owski, Jan Spectral isomorphism of Morse dynamical systems. (Russian summary) (83g:28033)

m, Daniel J. On primality tests. (83:10006)

Lind, D. A. Ergodic group automorphisms are exponentially recurrent. (83::28022)

Masur, Howard Interval exchange transformations and measured foliations. (83e:28012)

Mehta, M. L. See Bessis, D.; et al., (839:58036)
Mendes France, Michel Principe de la symétrie perturbée. [The principle of perturbed

symmetry] (83a:10089)

azima, Hiromi (with Harao, Masateru; Noguchi, Shoichi) Ergodic property of cellular automata. (83s:68067)

Moskvin, D. A. On the metric theory of automorphisms of a two-dimensional torus. (Russian) (83b:28024)

Moussa, Pierre See Bessis, D.; et al., (83g:58038)
Noguchi, Shoichi See Miyazima, Hiromi; et al., (83a:68067)
Odlyzko, Andrew M. (with Richmond, L. Bruce) On the compositions of an integer.

(30:0000)
Orea, Ishai Admissible functions with multiple discontinuities. (83j:54034)
Panslot, J.-J. The Morse sequence and iterated morphisms. (83d:68070)
Rhin, Georges See Coquet, Jean; et al., (83e:10071b)
Richmond, L. Bruce See Odlyzko, Andrew M., (83b:05004)
Schweiger, F. On the Parry-Daniels transformation. (83g:28035)
Shopov, Pet"r P. A classification of irrational numbers by approximation and its application in the metric theory of continued fractions. (Russian) (83f:10037)
Shebet Eberhand Absolute continuity simulative and supervise of Gauss seminors.

Siebert, Eberhard Absolute continuity, singularity, and supports of Gauss semigroups on a Lie group. (83m:60018)

Sinai, Ya. G. See Kornfel'd, I. P.; et al., (83a:28017)

Toffin, Philippe See Coquet, Jean, (83e:10071a) and (83e:10071b)
Ye, Yln Yu Directed graphs, indefinite equations and the problem of ergodicity for a family of random matrices. (Chinese. English summary) (83i:05036)

10K15 Diophantine approximation [See also 10Fxx.]

Mendès France, Michel Principe de la symétrie perturbée. [The principle of perturbed symmetry] 83a:10089
Vii'chinskii, V. T. The Duffin-Schaeffer conjecture and simultaneous approximations.

(Russian. English summary) 83a:10093

Yu, Kun Rui A note on a problem of Baker in metrical number theory. 83j:10060

secondary classifications:

Silesoraltiene, R. Some Diophantine approximations. II. (Russian. English and Lithuanian summaries) (83a:10064)

10K20 Arithmetic functions

Codecà, Psolo On the almost-periodic behavior of the remainder term of a certain class of strongly multiplicative functions. (Italian. English summary) 83k:10096

Coquet, Jean On a result of I. Kátni. 83:18053

Daboussi, Hodi On the limiting distribution of nonnegative additive functions. 830:18097

Erdős, Paul (with Kátni, I.) On the maximal value of additive functions in short intervals and on some related questions. 83a:18090a

(with Kâtai, I.) A correction to the paper: "On the maximal value of additive functions in short intervals and on some related questions". 83a:100906

Evilkov, V. V. A new form of reduction of additive functions. (Russian) 83h:10098

Inflektofev, Karl-Heinz: Limiting distributions and mean-values of multiplicative arithmetical functions. 83d:10064

Kátal, I. See Erdős, Paul, 83a:10090

oplinacher, John (with Schwarz, Wolfgang) Binomial expected values of arithmetical functions. 834:10065

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Križins, Z. Estimation of the rate of convergence of the distribution of values of some multiplicative functions. (Russian. English and Lithuanian summaries) 83b:10066
Lyashenko, N. N. Arithmetic modeling of Brownian motion and polyadic approximations. (Russian. English and Lithuanian summaries) 83b:10069
Manntavičius, E. Sums of multiplicative functions and limit theorems in probabilistic number theory. II. (Russian. English and Lithuanian summaries) 83b:10097
Nanopoulos, Photius Lois zèta et fonctions arithmètiques additives: convergence vers une loi normale. (English summary) [Zzd distributions and additive number-theoretic functions: convergence to a normal law! 83b:10061 functions: convergence to a normal law | 83;10061

Okada, Tadashige On a certain infinite series for a periodic arithmetical function.

Rursa, Imre Z. The law of large numbers for additive functions. 83i:16070

Schwarz, Wolfgang (with Spilker, J.) Remarks on Elliott's theorem on mean-values of multiplicative functions. 83e:10078

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Usmanov, Kh. Kh. Arithmetic modeling of multidimensional random processes. (Russian. Tajiki summary) 83::10095

Wirsing, Eduard Additive and completely additive functions with restricted growth. 83::10096 leev, N. M. Convergence to discontinuous distributions. (Russian. English and

secondary classifications:

Alladi, Krishnaswami The distribution of r(n) in the sieve of Eratosthenes. (83k:10081) Collison, Joseph E. An analogue of Kolmogorov's inequality for a class of additive arithmetic functions. (83k:10051)

Davydov, Yu. A. Local limit theorems for functionals of supremum type in the lattice case. (Russian. French summary) (83e:60017)

Haagerup, Uffe The best constants in the Khintchine inequality. (83m
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Suites limite-périodiques et théorie des nombres. V. [Limit-periodic sequences and

number theory. V] (83e:10067b)

Suites limite-périodiques et théorie des nombres. VI. [Limit-periodic sequences and number theory. VI] (83e:10067e)

urata, Leo On certain averages of $\omega(n)$. (83c:10064)

Parlow, A. I. On the limit distribution of the number of solutions of the equation $x^k = a$ in the symmetric group S_a . (Russian) (83g:20063)

Schwarz, Wolfgang Fourier-Ramanujan-Entwicklungen zahlen-theoretischer Funktionen und Anwendungen. [Fourier-Ramanujan expansions of number-theoretic functions and applications] (83a:10061b)

10K25 Normal numbers

Keane, Michael See Pearce, C. E. M., 83e:10079

Keane, Michael See Pearce, C. E. M., 83e:10079
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Pollington, Andrew The Hausdorff dimension of a set of normal numbers. 83k:10098
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numbers. 83k:10099
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secondary classifications:

Coquet, Jean Ensembles normaux et équirépartition complète. [Normal sets and complete equidistribution] (83h:10091)

Mukherjee, Samir Kumar On applications of information-theoretic notions in normal K-tuples. (83j:94010)

10K30 Irregularities of distribution

Beck, József Balanced two-colorings of finite sets in the square. I. 83g:10037
 Béjian, Robert Minoration de la discrépance d'une suite quelconque sur T. [Minorization of the discrepancy of a sequence on T] 83k:10101
 Drobot, Vladimir Uniform partitions of an interval. 83i:10054

secondary classifications

Beck, József Roth's estimate of the discrepancy of integer sequences is nearly sharp. (83:05040)

Losert, V. (with Nowak, Werner-Georg; Tichy, Robert F.) On the asymptotic distribution of the powers of a×s-matrices. (83e:10073)
Nowak, Werner-Georg See Losert, V.; et al., (83e:10073)
Tichy, Robert F. See Losert, V.; et al., (83e:10073)

10K35 Harmonic analysis and almost periodicity [See also 10H45.]

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Wagner, Gerold Note on irregularities of distribution. 834:10066

secondary classificati

nsel, Georges (with Troallic, Jean-Pierre) Suites uniformément distribuées et fonctions faiblement presque-périodiques. (English summary) [Uniformly distributed sequences and weakly almost periodic functions] (83&43010) petzky, Hans Günther (with Schwarz, Wolfgang; Wirsing, Eduard) Nonnegative sums

of roots of unity. (83f:10051)

Krasichkov-Ternovskil, I. F. For every invariant subspace admitting spectral synthesis, there exists a method of approximation. (Russian) (83a:46036)
Okada, Tadashige On a certain infinite series for a periodic arithmetical function.

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nktionen und Differenzen-Differentialgleichungen. [Zeta functions Reich, Axel Zetafu Reich, Axel Zetatunktionen und Differenzen-Differentialgleichunge and differential-difference equations] (83j:10050) Schwarz, Wolfgang See Kopetzky, Hans Günther, et al., (83f:10051) Troallic, Jean-Pierre See Hansel, Georges, (83d:43010) Wirsing, Eduard See Kopetzky, Hans Günther; et al., (83f:10051)

10K40 Non-Archimedean theory

Vasler, Jeffrey D. Limit theorems for uniformly distributed p-adic sequences. 83h:10100 secondary classifications:

sterlé, Joseph Réduction modulo p^n des sous-ensembles analytiques fermés de \mathbb{Z}_p^N . [Reduction modulo p^n of closed analytic subsets of \mathbb{Z}_p^N] (83j:12014)

10K50 Measure; Hausdorff dimension

Bumby, Richard T. Hausdorff dimensions of Cantor sets. 83g:10038 Kaufman, Robert P. On the theorem of Jarnik and Besicovitch. 83c:10075

secondary classifications:

Gilbert, William J. Fractal geometry derived from complex bases. (83m:10092) Host, Bernard (with Parreau, François) Mesures presque-idempotentes et progressi arithmétiques. (English summary) [Almost idempotent measures and arithmetical

u, François See Host, Bernard, (83k:43001)

10K99 None of the above, but in this section

Ignatov, Ts. A constant arising in the asymptotic theory of symmetric groups, and Poisson-Dirichlet measures. (Russian. English summary). 83::10072. Lato, Zhen Hua The average number of real roots of a random algebraic equation. (Chinese. English summary). 831:10067

Wegner, Horst A note on unimodality and asymptotic normality. 83h:10101

secondary classifications:

Ezhov, I. I. Bernoulli numbers and Chebyshev problems for primes. (Russian. English summary) (83f:10047)

On some probabilistic problems associated with prime numbers. (Russian) (83c-10005)

Jurkat, W. B. (with Van Horne, J. W.) On the central limit theorem for theta series.

Nathanson, Melvyn B. Waring's problem for sets of density zero. (83k:10089)

Porubský, Štefan On the probability that k generalized integers are relatively H-prime.

Ulanovskii, A. M. F-sequences and their arithmetic. (Russian) (83m:22006) Van Horne, J. W. See Jurkat, W. B., (83h:10075)

10Lxx Sequences of integers

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10L02 Density of sum sets, analogues and generalizations

Burr, Stefan A. (with Erdős, Paul) Completeness properties of perturbed sequences.

Erdős, Paul See Burr, Stefan A., 83f:10055

Joshi, V. S. Harmonic sums of certain subsets of nonnegative integers. 83c:10076

Mead, D. G. (with Narkiewicz, W.) The capacity of C_3 and free sets in C_m^2 . (83h:20029) Murata, Leo On some fundamental relations among certain asymptotic densities. (83e:10006)

Narkiewicz, W. See Mead, D. G., (83b:20029) Ruzsa, Imre Z. On difference sets. (83b:10073)

10L05 Addition of sequences, additive bases [See also 05B10.]

Gaschütz, Wolfgang Linear abgeschlossene Zahlenmengen. I. [Linearly closed number sets. I] 83m:10095

Hoffman, D. G. (with Klarner, David A.) Sets of integers closed under affine operators

—the finite basis theorem. 83e:10080 Klarner, David A. See Hoffman, D. G., 83e:1000

Ruzsa, Imre Z. On difference sets. 83::10073

Butson, Alton T. See Sumner, John S., (83:20023)
Kotlyar, B. D. Fourier coefficients and densities of sets of natural numbers. (Russian) (83m:42003)

Shen, Zhong Qi See Sun, Qi, (83k:05028)
Sumner, John S. (with Butson, Alton T.) Addition sets in a finite group. (83k:20023)
Sun, Qi (with Shen, Zhong Qi) Some results on cyclic difference sets. (Chinese. English summary) (83k:05028)

Wei, Wan Di The proofs of a class of distribution theorems with restricted sizes. (Chinese. English summary) (83h:05012)

10L10 Special sequences (density, multiplicative, additive and other properties)

Ajtai, Miklós (with Komlós, János; Szemerédi, Endre) A dense infinite Sidon sequence. 836:1005

Klarner, David A. A sufficient condition for certain semigroups to be free. 83e:10081

Komlós, János See Ajtai, Miklós; et al., 83f:10056 Leavitt, W. G. (with Mullin, Albert A.) Primes differing by a fixed integer. 83c:10077

Mortkawa, Ryozo Disjointness of sequences $[a,n+\beta_i]$, i=1,2. 83m:10096 Mullin, Albert A. See Leavitt, W. G., 83c:10077

Odoni, R. W. K. A conjecture of Krishnamurthy on decimal periods and some allied problems. 83a:10098

ington, Andrew (with Vanden Eynden, Charles) The integers as differences of a sequence. 83g:10039

idt, Frank W. On sets not containing arithmetic progressions of a certain kind.

npson, R. J. On a conjecture of R. L. Graham. 83j:10062

Stewart, C. L. (with Tijdeman, R.) On infinite-difference sets. 83f:10057 Szemerédi, Endre See Ajtai, Miklós; et al., 83f:10056

Tijdeman, R. See Stewart, C. L., 83f:10057

iden Evnden, Charles See Pollington, Andrew. 83e:10039

secondary classifications

Beck, József Roth's estimate of the discrepancy of integer sequences is nearly sharp.

wn, Thomas Craig (with Buhler, J. P.) A density version of a geometric Ramsey theorem. (83d:05010)

hler, J. P. See Brown, Thomas Craig, (83d:05010)

Coquet, Jean Harmonic properties of some arithmetical sequences. (83k:10102)
Erdős, Paul Some new problems and results in graph theory and other branches of combinatorial mathematics. (83k:05038)

Frankl, Péter (with Füredi, Zoltán) The Erdős-Ko-Rado theorem for integer sequences. (83d:05008)

Füredi, Zoltán See Frankl, Péter, (83d:05008)

Mignotte, Maurice Une extension de théorème de Skolem-Mahler. (Italian summary)

[An extension of the Skolem-Mahler theorem] (83k:10020)

Peskun, Peter H. Theoretical tests for choosing the parameters of the general mixed linear congruential pseudorandom number generator. (83f:65007)

Wojcik, J. On the density of some sets of primes connected with cyclotomic polynomials. (83k:10080)

10L15 Representation functions

Furstenberg, Harry Poincaré recurrence and number theory. 834:10067

secondary classifications:

Graham, R. L. (with Li, Wen Ch'ing Winnie; Paul, Jerome L.) Monochromatic lines in

partitions of Z". (83e:10065)
usman, Miriam (with Shapiro, Harold N.) On the denseness of arithmetic vectors. (83f:10046)

LI, Wen Ch'ing Winnie See Graham, R. L.; et al., (83c:10065)
Paul, Jerome L. See Graham, R. L.; et al., (83c:10065)
Shapiro, Harold N. See Hausman, Miriam, (83f:10046)

10L20 Arithmetic progressions [See also 10H20.]

Deuber, Walter On van der Waerden's theorem on arithmetic progressions. 83e:10082 Newman, Donald J. Sequences without arithmetic progressions. 83h:10102 Porubský, Štefan Results and problems on covering systems of residue classes. 83h:10068

secondary classifications:

Host, Bernard (with Parreau, François) Mesures presque-idempotentes et progressions arithmètiques. (English summary) [Almost idempotent measures and arithmetical arithmétiques. (English si progressions) (83k:43001)

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0082 :10068 Mignotte, Maurice Une extension de théorème de Skolem-Mahler. (Italian summary) [An extension of the Skolem-Mahler theorem] (83k:10020) Parreau, François See Host, Bernard, (83k:43001)

101.99 None of the above, but in this section secondary classifications:

Fredricksen, Harold A survey of full length nonlinear shift register cycle algorithms. (83:68056)
Galovich, Steven (with Stein, Sherman) Splittings of abelian groups by integers.

(83f-20018)

Séébold, Patrice Morphismes itérés, mot de Morse et mot de Fibonacci. (English summary) [Iterated morphisms, Morse and Fibonacci sequences] (83m:20096) in, Sherman See Galovich, Steven, (83f:20018)

10Mxx Rational arithmetic of algebraic objects

10M05 Polynomials [See also 13F20.]

Desimirova, L. K. A sufficient condition for the reducibility of a class of integer polynomials in the field of rational numbers Q. (Bulgarian. English and Russian summaries) 83h:10103

(with Todorova, S. S.) A theorem on the irreducibility of Pólya's integer

polynomials. (Bulgarian. German and Russian summaries) 83k:10074

Kantardzhieva, Elena See Pirgov, Dimit"r, 83f:10059

Pirgov, Dimit"r (with Ralchinov, R. I.) New theorems on irreducibility of integer Hurwitz polynomials over the field of rational numbers. (Bulgarian. English and Russian summaries) 83f:10058

(with Kantardzhieva, Elena) A class of integer polynomials that are irreducible over the rational number field. (Bulgarian. English and Russian summaries) 83f:10059
Raichinor, R. I. See Pirgov, Dimit"r, 83l:10058
Todorova, S. S. See Desimirova, L. K., 83l:10074

secondary classifications:

Brillhart, John Note on irreducibility testing. (83g:12002)
Kutirkov, Georgi See Pirgov, Dimit'r, (83f:12014) and (83h:12034)
Laohakosol, Vichian (with Ubolsri, Patchara) A short note on integral-valued polynomials. (83k:10036)

on, Patrick A note on recurrences satisfied by special classes of polynomials. (83e:12019)

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Pirgov, Dimit'r (with Kutirkov, Georgi) A generalization of Pólya's criterion for the irreducibility of integer polynomials over the field of rational numbers. (Russian. German and Polish summaries) (83):12034)

(with Kutirkov, Georgi) Some theorems on the applicability of Pólya-type criteria

for the irreducibility of integer polynomials. (Bulgarian. English and Russian

summaries) (83f:12014) Ubolsri, Patchara See Laohakosol, Vichian, (83k:10036)

10M10 Valued fields [See also 12J10.]

secondary classifications:

Dixon, John D. Exact solution of linear equations using p-adic expansions. (83m:65025)
Gilmer, Robert Extension of an order to a simple transcendental extension. (83g:12024)
Ploski, Arkadiusz Une démonstration du théorème des zéros pour les séries convergentes.
(Russian summary) [A proof of the Nullstellensatz for convergent series] (83e-32006) Schappacher, Norbert Some remarks on a theorem of M. J. Greenberg. (83f:13008)

10M15 Ordered fields [See also 12J15.]

10M20 Matrices [See also 15A36.]

secondary classifications:

Gronnu, Hans-Dietrich O. F. (with Steffen, Günther) A problem of L system interest.

Ochoa, J. Some questions related to the similarity of integral matrices. (Spanish) (831:15008) Steffen, Günther See Gronau, Hans-Dietrich O. F., (83b:10004)

10M99 None of the above, but in this section

Reutenauer, Christophe Propriétés arithmétiques de séries rationnelles et ensembles denses. [Arithmetical properties of rational series and dense sets] 831:10104

secondary classifications:

Koblitz, Neal I. Why study equations over finite fields? (83h:12030)
 Kuipers, L. (with Shiue, Jau Shyong) Uniform distribution of sequences in rings of integral quaternions. (83b:10064)
 Shiue, Jau Shyong See Kuipers, L., (83b:10064)

10Nxx Connections with logic

10N05 Decidability [See also 03B25.]

Chong, C. T. Hilbert's tenth problem. 83i:10075

secondary classifications:

Jones, James P. Classification of quantifier prefixes over Diophantine equations. (83æ93637)

Kirby, Laurie (with Paris, Jeff B.) Accessible independence results for Peano arithmetic. (R3i:03096)

genilsern, M. Le théorème de Matiyassévitch et résultats connexes. [The Matiyasevich theorem and related results] (83g:63041)

Michel, Pascal Borne supérieure de la complexité de la théorie de N muni de la relation de divisibilité. [Upper bound for the complexity of the theory of N with the divisibility relation) (83e:630)

Paris, Jeff B. See Kirby, Laurie, (R3j:03096)

10N10 Ultraproducts [See also 03C20.]

10N15 Nonstandard arithmetic [See also 03H15.]

10N99 None of the above, but in this section

12-XX ALGEBRAIC NUMBER THEORY, FIELD THEORY AND POLYNOMIALS

12-01 Elementary exposition, textbooks

on, lain T. *Introduction to field theory. 83:12001 (Brauer, George U.) See Hocke, Erich, 83m:12001 Edwards, Harold M. ★Fermat's last theorem. 83b:12001a

Edwards, Harold M. *Fermar's last theorem. 838:12001a

*Elocarguar recopena Depua. (Russian) [Fermar's last theorem] 838:12001b

Gilbert, William J. Geometry of radix representations. 833:12001

(Goldman, Jay R.) See Hecke, Erich, 83s:12001

Hecke, Erich *Lectures on the theory of algebraic numbers. 83s:12001

Ireland, Kenneth F. (with Rosen, Michael L) *A classical introduction to modern number theory. 83g:12001

(Kallania, V. L.) See Edwards, Harold M., 83s:12001b

(Naturn, V. L.) See Edwards, Francis M., 836:120016
(Kotzen, R.) See Hecke, Erich, 83m:12001
Mahler, Kuri ★p-adic numbers and their functions. 83i:12002
Mutaffan, Chude ★Équations algébriques et théorie de Galois. (French) [Algebraic equations and Galois theory] 83a:12001
Rosen, Michael I. See Ireland, Kempeth F., 83g:12001
(Skopin, A. I.) See Edwards, Harold M., 83b:12001b

secondary classifications:

Carrega, Jean-Claude *Théorie des corps. (French) [Theory of fields] (83±01007)
(Koblitz, Neal I.) See Kostrikin, A. I., (83±00003)
Kostrikin, A. I. *Introduction to algebra. (83±00003)
Lidi, Rudolf (with Wiesenbauer, Johann) *Ringtheorie und Anwendungen. (German)
[Ring theory and applications] (83±16001)
Tignol, Jean-Pierre *Leçons sur la théorie des équations. (French) [Lectures on the theory of equations] (83±01048)
Wiesenbauer, Johann See Lidi, Rudolf, (83±16001)

12-02 Advanced exposition (research surveys, monographs, etc.)

Lang, Serge Units and class groups in number theory and algebraic geometry. 83m:12902 secondary classifications:

(Auhert, Karl Egil) See Kahane, Jean-Pierre, (83j:12018a) and (83j:12018b)

Kahane, Jean-Pierre Hilbert's 13th problem: an intersection of algebra analysis and geometry, I. (Norwegian, English summary) (83j:12018a)
Hilbert's 13th problem: an intersection of algebra analysis and geometry. II.
(Norwegian, English summary) (83j:12018b) (Øksendal, Bernt) See Kahane, Jean-Pierre, (83j:12018a) and

(83j:12018b)

12-03 Historical (must also be assigned at least one classification number from Section 01)

Franci, Raffaella (with Toti Rigatelli, Laura) *Storia della teoria delle equazioni algebriche. (Italian) [History of the theory of algebraic equations] 83a:12002 Toti Rigatelli, Laura See Franci, Raffaella, 83a:12002

secondary classifications:

Akritas, Alkivindis G. (with Danielopoulos, Stylianos D.) An unknown theorem for the tion of the roots of polynomials. (83i:01037)

(Bolyai, János) See Weszely, Tibor, (R3m:01032)
Danielopoulos, Stylianos D. See Akritas, Alkiviadis G., (83i:01037)
Feit, Walter Theory of finite groups in the twentieth century. (83i:20001)
Weszely, Tibor On the paper "Responsio" by János Bolyai. (Romanian) (R3m:01032)

12-04 Explicit machine computation and programs (not the theory of computation or programming)

Auslander, L. (with Tolimieri, R.; Winograd, S.) Hecke's theorem in quadratic reciprocity, finite nilpotent groups and the Cooley-Tukey algorithm. 83m:12003

Brillbart, John Note on irreducibility testing. 83g:12002

Innet, Jacques (with Loos, Rüdiger) Deterministic versus probabilistic factorization of integral polynomials. (See 83k:68003) nter, David G. Irreducible polynomials with integral coefficients have succinct

certificates. 83m12003

certificates. 83a:12003

Heintz, Joos (with Sieveking, Malte) Absolute primality of polynomials is decidable in random polynomial time in the number of variables. 83m:12004

(with Schnorr, C.-P.) Testing polynomials which are easy to compute. 83g:12003

Jeger, M. Zur Behandlung des euklidischen Algorithmus bei Polynomen mit einem programmaierbaren Taschen-Rechner. [On the treatment of the Euclidean algorithm in polynomials with a programmable pocket calculator] 83k:12001a

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12F99 None of the above, but in this section

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van Geel, J. (with van Oystaeyen, Freddy M. J.) About graded fields. (83b:16001) Macintyre, Angus The complexity of types in field theory. (83g:03044) van Oystaeyen, Freddy M. J. See van Geel, J., (83b:16001)

12Gxx Homological methods

12G05 Galois cohomology [See also 12A60, 12B20, 13A20, 16A16.]

n, Werner Brauer group and Diophantine geometry: a cohomological approach. 83m: 12037

Kato, Kazuya A generalization of local class field theory by using K-groups. II. 83g:12020a

A generalization of local class field theory by using K-groups. III. 83g:12020b
suc, Jean-Jacques Groupe de Brauer et arithmétique des groupes algébriques linéaires
sur un corps de nombres. [The Brauer group and arithmétic of linear algebraic groups on a number field 83d:12010

secondary classifications:

Cornell, Gary (with Rosen, Michael I.) Cohomological analysis of the class group extension problem. (83b:12011)

rton (with Kantor, William M.; Schacher, Murray) Relative Brauer groups. II. (83a:12018)

Haile, Darrell E. On crossed product algebras arising from weak cocycles. (83g:16041)
Kantor, William M. See Fein, Burton; et al., (83a:12018)
Katz, Nicholas M. Crystalline cohomology, Dieudonné modules, and Jacobi sums.

(83a:14022)

Ribenboim, Paulo Active sums of groups. (83j:20041)
Rosen, Michael I. See Cornell, Gary. (83b:12011)
Schacher, Murray See Fein, Burton; et al., (83a:12018)
Singh, Sukhjit Pro-homology and isomorphisms of pro-groups. (83a:20066)
Wurfel, Tilmann Über die relative Brauer-Gruppe der maximalen p-Etweiterung eines
Körpers ohne p-te Einheitswurzeln. [On the relative Brauer group of the maximal
p-extension of a field without pth roots of unity] (83a:12023)
Zynpkov, N. P. Universally imbedded Galois extensions. (Russian) (83b:12017)
Reduction theorem for universally consistent fields (Pausian) (63b:12017)

Reduction theorems for universally consistent fields. (Russian) (83h:12037)

12G10 Cohomological dimension

secondary classifications:

Uchida, Kôji Galois groups of unramified solvable extensions. (83m:12017)

12G99 None of the above, but in this section

secondary classifications:

Elman, Richard On Arason's theory of Galois cohomology. (83i:10025) Pletch, Andrew Strong completeness in profinite groups. (83e:20036) Verschoren, Alain H. M. J. A check list on Brauer groups. (83k:13001)

Brauer groups See Verschoren, Alain H. M. J., (83k:13001)

12Hxx Differential and difference algebra

12H05 Differential algebra [See also 13N05.]

Brestovski, Michel Déviation et indépendance algébrique de solutions génériques d'équations différentielles du second ordre. (English summary) [Forking and algebraic pendence of generic solutions of differential equations of the second order) 83k:12022

nge, Marta Models of differential algebra in the context of synthetic differential ometry. 83a:12033

Cohn, Richard M. Order and dimension. 83m:12038 Glertz, M. (with Kwong, Man Kam; Zettl, A.) Commuting linear differential expressions. 83d:12011

Grassl, Richard M. Polynomials in denumerable indeterminates. 83f:12017 Guil Guerrero, F. A construction of the jet of the resolvent. 83m:12039
Hahn, Wolfgang Commutative linear differential operators. 82e:12022
Ishibashi, Yasunori Symbolic powers of regular primes. 83f:12018

Ishibashi, Yasunori Symbolic powers of regular primes. 83f:12018
Keigher, William F. On the quasi-affine scheme of a differential ring. 83c:12023
Kolchin, E. R. Differential algebraic structures. (Russian summary) 83k:12023 Kupershmidt, Boris On algebraic models of dynamical systems. 83f:12019
Kwong, Man Kam See Glertz, M., et al., 83d:12011
Mokhov, O. I. Commuting ordinary 4ff.

ov, O. I. Commuting ordinary differential operators of rank 3 that correspond to an elliptic curve. (Russian) 83m:12040

Moses, Joel (with Zippel, Richard) An extension of Liouville's theorem. 83d:12012 Rosenlicht, Maxwell On the value group of a differential valuation. II. 83d:12013
Singer, Michael F. Algebraic solutions of nth order linear differential equations. R35-12022

Trendafilov, I. D. Integration in differential modules: I. (Russian and Bulgarian summaries) 83j:12022

Zettl, A. See Giertz, M.; et al., 83d:12011 Zippel, Richard See Moses, Joel, 83d:12012

secondary classifications:

Bank, Steven B. A note on a theorem of C. L. Siegel concerning Bessel's equation.

Bobylev, A. V. Method of investigation of nonlinear evolution equations. Formal theory. (Russian) (83j:58053)

Method of investigation of nonlinear evolution equations. Applications equations of Korteweg-de Vries and Boltzmann type. (Russian) (83j:58054) Bulum, Alexandru Differential equations in local rings. (83e:13031) nach.

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Carlson, Robert Construction of isospectral deformations of differential operators with periodic coefficients. (83j:58099)
Chen, Yin Tong See Li, Guo Ping; et al., (83m:39001)
Cherednik, I. V. Algebraic aspects of two-dimensional chiral fields. I. (Russian)
(83i:81053a)

dd, R. K. (with Morris, H. C.) Singular Bäcklund transformations. (83k:81058)

s, John Linearisation of Benney's equations. (83g:58028) (with Holm, Darryl D.; Kupershmidt, Boris) Gauge-invariant Poisson brackets chromohydrodynamics. (83k:76088)

Goodeart, Kenneth R. (with Warfield, Robert B., Jr.) Primitivity in differential operator rings. (83k:13018)

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Guil Guerrero, F. See Martinez Alonso, L., (83a:58059)

Halford, W. D. Lie transformation groups. (83k:22012b)

Holm, Darryl D. See Gibbons, John; et al., (83k:76083)

Kupershanish, Boris Involutivity of conservation laws for a fluid of finite depth and Benjamin-Ono equations. (83m:58043)

Singular symmetries of integrable curves and surfaces. (83e:35110)

Korteweg-de Vries surfaces and Backlund curves. (83k:58046)

Families of generalized sine-Gordon fields. (83e:58039)

See also Gibbons, John; et al., (83k:76083)

LJ, Guo Ping (with Chen, Yin Tong; Liu, Huai Jun) Difference operation and its inverse operation. (Chinese: English summary) (83m:30901)

operation. (Chinese. English summary) (83m:39001)
Liu, Huai Jum See Li, Guo Ping; et al., (83m:39001)
Martinez Alonso, L. (with Guil Guerrero, F.) Modified Hamiltonian systems and canonical transformations arising from the relationship between generalized
Zakharov-Shabat and energy-dependent Schrödinger operators. (83a:58050)
Morris, H. C. See Dodd, R. K., (83k:81058)

d, Charles F. Nearly perfect systems and effective generalizations of Shidlovski's

Ongoon, Charles F. Velasy period systems of partial differential equations theorem. (83e:10057)

Pommaret, J.-F. A survey of Galois theory for systems of partial differential equations and its applications in physics. (See 83m:81001)

Rasala, Richard The Rodrigues formula and polynomial differential operators.

(83g:33009)

dwick, W. F. Errata to: "The Hamilton Cartan formalism for rth-order Lagrangi and the integrability of the KdV and modified KdV equations" [Lett. Math. Phys. 5 (1981), no. 2, 137-141; MR 82k:58051]. (83j:58061)

Vinogradov, A. M. Some homology systems connected with the differential calculus in commutative algebras. (Russian) (83m:58084)
Warfield, Robert B., Jr. See Goodearl, Kenneth R., (83k:13018)

Ylinen, Raimo An algebraic theory for analysis and synthesis of time-varying linear differential systems. (83d:93041)

Integrable systems *Integrable systems. (83k:35081)

12H10 Difference algebra [See also 39Axx.]

Infante, Ronald P. The structure of strongly normal difference extensions. 83h:12039 On the Galois theory of difference fields. 83f:12020

12H20 Abstract differential equations [See also 34Gxx.]

Perko, Richard Zur Lösung nicht-linearer Differentialgleichungen in Körpern positiver Charakteristik bei nicht-iterativer Differentiation. [On the solutions of nonlinear differential equations in fields of positive characteristic with noniterative differentiation 834:12014

secondary classifications:

Honda, Taira Algebraic differential equations. (83):14010)

12H25 p-adic differential equations [See also 12B40, 14G20, 34Gxx.]

son, A. (with Dwork, Bernard; Sperber, Steven) Growth of solutions of linear differential equations at a logarithmic singularity. 83e:12017

Bombieri, Enrico (with Sperber, Steven) On the p-adic analyticity of solutions of linear differential equations. 83c:12024

Oristol, Gilles Décomposition des matrices en facteurs singuliers. Applications aux équations différentielles. [Decomposition of matrices into singular factors.

Applications to différential equations.] 83h:12040

Dwork, Bernard Nilpotent second order linear différential equations with Fuchsian

singularities. 83g:12021

See also Adolphson, A.; et al., 83e:12017

Robba, Philippe Factorisation d'opérateurs différentiels à coefficients rations [Factorization of differential operators with rational coefficients] 83i:12021

[Factorization of differential operators with rational coefficients] ass. 12021

Sibuya, Yasutaka (with Sperber, Steven) Convergence of power series solutions of p-adic nonlinear differential equation. 83:12021

Sperber, Steven See Bombieri, Enrico, 83::12024; Adolphson, A.; et al., 83::12017 and Sibuya, Yasutaka, 831:12021

Koblitz, Neal I. The hypergeometric function with p-adic parameters. (83h:12026) Sibuya, Yasutaka An application of Newton iteration procedure to p-adic differential equations. (83m:34005)

12H99 None of the above, but in this section

12Jxx Topological fields

12J05 Normed fields

12J10 Valued fields [See also 10M10.]

Cuhen, Jo-Ann D. Locally bounded topologies on the ring of integers of a global field.

Dai, Zhi Zhong Henselian valued fields. (Chinese. English summary) 83k:12024

Hartmann, Peter Ein Beweis des Henselschen Lemmas für maximal bewertete Körper.

[A proof of Hensel's lemma for maximally valued fields] 83g:12022

Heerema, N. (with Morrison, T.) On derivations induced by p-adic fields. 83e:12018

Hermans, Arnold **Das analytische Tensorprodukt. (German) [The analytic tensor product] 83a:12634

Krasser, Marc Anneaux gradues generaux. [General graded rings] 20g-12023
Mathiak, Karl Zur Bewertungstheorie nicht kommutativer K\u00f6rper. [On the valuation theory of noncommutative fields] 83e:12026 Morrison, T. See Hoorema, N., 83e:12018

secondary classifications:

Basarah, Şerban A. On a class of preorderings of higher level. (83m:12033)
Harman, Jonathan Chains of higher level orderings. (83m:12034)
Klaus, Dieter Interval components of non-Archimedean number systems. (83d:04002)
Smith, Rick L. Effective valuation theory. (83h:03003)

12J15 Ordered fields [See also 10M15.1

Craven, Thomas C. Witt rings and orderings of skew fields. 83m:12041

Dai, Zhi Zhong Some remarks on ordered fields. (Chinese. English summary) 83m:12042

Gilmer, Robert Extension of an order to a simple transcendental extension. 83g:12024

tonovskii, M. Ya. (with Chudnovsky, David V.; Chudnovsky, Gregory V.; Hewitt, Edwin) Rings of real-valued continuous functions. II. (83f:54011) acron, Maurice c-orderable division rings with involution. (83m:16013)

Chudnovsky, David V. See Antonovskii, M. Ya.; et al., (83f:54011)
Chudnovsky, Gregory V. See Antonovskii, M. Ya.; et al., (83f:54011)
Dubois, Donald Ward Second note on Artin's solution of Hilbert's 17th problem. Order

spaces. (83j:12017)

Ershov, Yu. L. Totally real extensions of fields. (Russian) (R3m:12045)
Hewitt, Edwin See Antonovskli, M. Ya.; et al., (R3f:54011)
Kosheleva, O. M. See Vroegindewey, P. G.; et al., (R3f:54026)
Kreinovich, V. Ya. See Vroegindewey, P. G.; et al., (R3f:51026)
Prestel, Alexander Decidable theories of preordered fields. (R3e:03049)
Vroegindewey, P. G. (with Kreinovich, V. Ya.; Kosheleva, O. M.) From a const

partially ordered set of events to a partially ordered field of time intervals. (83:51026)

12J17 Topological semifields

12J20 General valuation theory

Chen, Bing Hui (with Qi, Zhi Nan) On groups of units of valuation rings. (Chinese. English summary) 83m:12043

Mathiak, Karl Der Approximationssatz für Bewertungen nicht kommutativer Körper.

[The approximation theorem for valuations of noncommutative fields] 83m:12044 Qi, Zhi Nan See Chen, Bing Hui, 83m:12043

secondary classifications:

van Deuren, J.-P. (with van Geel, J.; van Oystaeyen, Freddy M. J.) Genus and a Riemann-Roch theorem for noncommutative function fields in one variable. (83k:14007)

van Goel, J. (with van Ovstaeven, Freddy M. J.) The concept of a place in ring theory. (83f:16009)

See also van Deuren, J.-P.; et al., (83k:14007)
Holland, Samuel S., Jr. *-valuations and ordered *-fields. (83k:12019a)
Erratum to: "*-valuations and ordered *-fields". (83k:12019b)

van Oystaeyen, Freddy M. J. See van Geel, J., (83f:16009) and van Deuren, J.-P.; et al., (83f:14007)

Smith, Rick L. Effective valuation theory. (83h:03053)

12J25 Non-Archimedean valued fields [See also 26E30, 30G05, 32D25, 46P05.1

Bartenwerfer, Wolfgang Die strengen metriachen Kohomologiegruppen des Einheitspolyzylinders verschwinden. [The strict metric cohomology groups of the unit polycylinder vanish] 83i:12022

van den Dries, Lou A specialization theorem for p-adic power series converging on the closed unit disc. 83a:12035

Schülting, Heinz-Werner On real places of a field and their holomorphy ring. 83k:12025 secondary classifications:

Ershov, Yu. L. Fields with several valuations. (Russian) (83):03053)

12J27 Krasner-Tate algebras [See mai * 32E27, also 46P05.] secondary classifications:

Bartenwerfer, Wolfgang Die strengen metrischen Kohomologiegruppen des Einheitspolyzylinders verschwinden. [The strict metric cohomology groups of the unit polycylinder vanish] (83i:12022)

12J99 None of the above, but in this section

secondary classifications:

Day, Brian J. Gel'fand dualities over topological fields. (83g:18014)

12Kxx Generalizations

12K05 Near-fields [See also 16A76.]

secondary classifications:

Bhattaral, Hom Nath On geometric nearfields. (83f:51022)
Pellegrini Manara, Silvia On near-rings whose proper factor near-rings are near-fields.
(Italian. English summary) (83i:16047)

Pilz, Günter Near-rings: what they are and what they are good for. (83g:16066) Vanharová, Alena Homomorphisms of projective planes over quasifields and nearfields.

12K10 Semifields [See also 16A78.]

secondary classifications:

Ganley, Michael J. Central weak nucleus semifields. (83e:51013)

12K99 None of the above, but in this section

nturovs, Alena Places of alternative fields. (Russian and Czech summaries) (83e:17019)

12Lxx Connections with logic

12L05 Decidability

Ershov, Yu. L. Totally real extensions of fields. (Russian) 83m:12045

Jensen, Christian U. Sur une classe de corps indécidables. (English sums
of undecidable fields) 83m:12046 nary) [On a class

McKenne, Kenneth Some Diophantine Nullstellensätze. 83i:12023

secondary classifications:

Baur, Walter Die Theorie der Paare reell abgeschlossener Körper. [The theory of pairs of real-closed fields] (83-e03028)

Dai, Zhi Zhong Henselian valued fields. (Chinese. English summary) (83k:12024)

Ershov, Yu. L. Fields with several valuations. (Russian) (83j:03053)

Prestel, Alexander Decidable theories of preordered fields. (83e:03049)

Zlegler, Martin Einige unentscheidbare Körpertheorien. [Some undecidable theories of fields] (83u:03040a)

Einige unentscheidbare Körpertheorien. [Some undecidable theories of fields] (83m:03040b)

12L10 Ultraproducts

secondary classifications:

Ershov, Yu. L. Fields with several valuations. (Russian) (83j:03053) tthoff, Klaus Ultraproduits des groupes finis et applications à la théorie de Galois. [Ultraproducts of finite groups and applications to Galois theory] (83b:03032)

12L15 Nonstandard arithmetic [See also 03H15.]

Duret, Jean-Louis Les corps faiblement algébriquement clos non séparablement clos ont la propriété d'indépendence. [Nonseparably closed weakly algebraically closed fields have the independence property] 83i:12024

12L99 None of the above, but in this section

Jarden, M. Transfer principles for finite and p-adic fields. 83h:12041

secondary classifications:

Macintyre, Angus The complexity of types in field theory. (83g:03044)
Ruitenburg, W. Field extensions. (83e:03099)
Smith, Rick L. Effective valuation theory. (83b:03063)

13-XX COMMUTATIVE RINGS AND ALGEBRAS (For the noncommutative case, see 16-XX.)

13-01 Elementary exposition, textbooks

13-02 Advanced exposition (research surveys, monographs, etc.)

Hutchins, Harry C. ★Examples of commutative rings. 83a:13001

13-03 Historical (must also be assigned at least one classification number from Section 01)

(Krull, Wolfgang) See Nastold, H.-J., (83k:01044b)
Nastold, H.-J. Wolfgang Krulls Arbeiten zur kommutativen Algebra und ihre Bedeutung für die algebraische Geometrie. [The works of Wolfgang Krull on commutative algebra and their importance for algebraic geometry] (83k:01044b)

13-04 Explicit machine computation and programs (not the theory of computation or programming)

Grigor'ev, D. Yu. Multiplicative complexity of a bilinear form over a commutative ring.

RNet 3001

secondary classifications:

Cohen, Josh D. (with Yun, David Y. Y.) Algebraic extensions of arbitrary integral

Yun, David Y. Y. See Cohen, Josh D., (83b:13003)

13-06 Proceedings, conferences, etc.

(Draper, Richard N.) See Commutative algebra, 83d:13001
Commutative algebra ★Commutative algebra. 83d:13001
Commutative algebra and algebraic geometry ★Commutative algebra and algebraic geometry. 83b:13001

numutative Algebra and Algebraic Geometry See Commutative algebra and algebraic geometry, 83h:13001

secondary classifications:

All-Union Sym

Theory of Rings, Algebras and Modules * Пятый Всесов Теория Колен, Алгебр и Moayack. (Russian) [Fifth All-Union Symposium on the Theory of Rings, Algebras and Modules] (83m:16001)

rsk See All-Union Symposium: Theory of Rings, Algebras (83m: 16001)

13Axx General commutative ring theory

13A05 Divisibility

Bunder, M. W. A new definition of division in rings of quotients of Euclidean rings.

83e:13002 stad, Bruce (with Mott, Joe L.) Finitely generated groups of divisibility. 83h:13001 Mott, Joe L. See Glastad, Bruce, 83h:13001

econdary classifications:

Knoche, Norbert Charakterisierungen von faktoriellen und noetherschen Ringen mit unendlich vielen Primeiementen. [Characterizations of factorial and Noetherian rings with infinitely many prime elements] (83g:13012)

13A10 Radical theory

secondary classifications

Nowicki, Andrzej On prime ideals in Noetherian d-MP rings of a positive characteristic. (Russian summary) (83a:13004)

Anderson, D. D. (with Anderson, David F.) Divisorial ideals and invertible ideals in a graded integral domain. 83:13001

Anderson, David F. See Anderson, D. D., 83:13001

Bernan, David Roy The number of generators of a colength N ideal in a power series

ring. 83d:13002

Gilmer, Robert On the ideal class group of a flat overring. 83c:13001 Huckaba, James A. (with Papick, Ira J.) When the dual of an ideal is a ring. 83h:13002

Matsuda, Ryūki On Kennedy's conjecture. (Japanese) 83h:13003 McLean, K. R. Local rings without bounded ideals. 83e:13003

Pakala, J. V. (with Shores, T. S.) On compactly packed rings. 83e:13002
Papick, Ira J. See Huckaba, James A., 83h:13002

nschuch, Bodo Beiträge zur konstruktiven Theorie der Polynomideale. XVII/1. Zur Hentzelt/Noether/Hermannschen Theorie der endlich vielen Schritte. (English and ies) [Contribution to the constructive theory of polynomial ideals. XVII/1. On the Hentzelt/Noether/Hermann theory of finitely many operations] 83d:13003

Shores, T. S. See Pakala, J. V., 83e:13002

secondary classifications:

Keigher, William F. On the quasi-affine scheme of a differential ring. (83c:12023)

13A17 Prime and primary ideals and their generalizations

Artico, Giuliano (with Marconi, Umberto; Moresco, Roberto) A subspace of Spec(A) and its connexions with the maximal ring of quotients. 83h:13004

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Marconi, Umberto See Artico, Giuliano; et al., 83h:13004
Moresco, Roberto See Artico, Giuliano; et al., 83h:13004
Ngô Việt Trung On a certain transitivity of the graded ring associated with an ideal. 831:13001 O'Carroll, L. (with Rauf Qureshi, M. A.) Primary rings and tensor products of algebras. 83/-13002

Rauf Qureshi, M. A. See O'Carroll, L., 83i:13002 Ursiams, R. An analog of Nagata theorem from U.F.D. (Romanian summary) 83:13003

secondary classifications:

Arnold, J. T. (with Boisen, M. B., Jr.) Simple going down and going down. (83g:13008) Boisen, M. B., Jr. See Arnold, J. T., (83g:13008) Boisen, M. B., Jr. See Arnold, J. T., (83g:13008) Dolbs, David E. (with Fontana, Marco) Classes of commutative rings characterized by going-up and going-down behavior. (83k:13017) Fontana, Marco See Dobbs, David E., (83k:13017) Hingston, Philip Effective decomposition in Noetherian rings. (83e:03040) Mináč, Ján The covering of rings by valuation rings. (Russian summary) (83k:13004) Northcott, D. G. Remarks on the theory of attached prime ideals. (83k:13019) Radliff, L. J., Jr. Six notes on chains of prime ideals. (83k:13012)

13A18 Valuations and their generalizations

Gräter, Joachim Der Approximationssatz für Manisbewertungen. [The approximation theorem for Manis valuations] 83e:13004

Mimáč, Ján The covering of rings by valuation rings. (Russian summary) 83i:13004

Močkoř, Jiří Semivaluations and d-groups. 83e:13005

Anderson, David F. (with Dobbs, David E.; Huckaba, James A.) On seminormal overrings. (83h:13016)

Dobbs, David E. See Anderson, David F.; et al., (83h:13016) Huckaba, James A. See Anderson, David F.; et al., (83h:13016)

13A20 Brauer groups [See also 12Gxx, 16A16.]

Gabber, Ofer Some theorems on Azumaya algebras. 83d:13004

Lee, Helsook (with Orzech, Morris) Brauer groups for Krull domains. 83e:13006

Orzech, Morris Brauer groups and class groups for a Krull domain. 83h:13005

(with Verschoren, Alain H. M. J.) Some remarks on Brauer groups of Krull

domains. 83h: 13007 See also Lee, Heisook, 83e:13006
 Verschoren, Alain H. M. J. The Brauer group of a quasi-affine-scheme. 83h:13006
 A check list on Brauer groups. 83k:13001
 A Mayer-Victoris sequence for Brauer groups of graded rings. 83e:13007

 See also Orzech, Morris, 83h:13007

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Brauer groups See Verschoren, Alain H. M. J., 83k:13001

secondary classifications:

Fein, Burton (with Schacher, Murray) Relative Brauer groups. III. (83j:12009) Hoobler, Raymond T. When is Br(X) = Br'(X)? (83g:14006) Kmus, Max-Albert (with Ojanguren, Manuel) Cohomologie étale et groupe de Brauer. [Etale cohomology and the Brauer group] (83b:16006) Merkur'ev, A. S. On the norm residue symbol of degree 2. (Russian) (83b:12015) Opinguren, Manuel See Kuus, Max-Albert, (83k:16006)
van Oystaeyen, Freddy M. J. On Brauer groups of arithmetical graded rings. (83b:16004)
Procesi, C. Relations between algebraic geometry and noncommutative algebra. Cyclic algebras and the Lüroth problem. (Italian) (83a:14037)
Schacher, Murray See Fein, Burton, (83):12009)

13A99 None of the above, but in this section

Aubert, Karl Egil (with Beck, István) Chinese rings. 83h:13008
Beck, István See Aubert, Karl Egil, 83h:13008
Farahat, H. K. Additions compatible with multiplication. 83h:13009
Simmons, Harry Erratum: "Reticulated rings" [J. Algebra 66 (1980), no. 1, 169–192; MR 82d:13005]. 83a:13002 aminathan, Thanjarur Venkatasubramanian Geometry of Boolean-like rings.

A Stone's representation theorem for Boolean-like rings. 834:13005h

13Bxx Ring extensions and related topics

13B02 Extension theory

Dobbs, David E. On locally divided integral domains and CPI-overrings. 83j:13002
Haggenmüller, Rudolf Diakriminanten und Picard-Invarianten freier quadratischer
Erweiterungen. (English summary) [Discriminants and Picard invariants of free
quadratic extensions] 83h:13010
Heitmann, Raymond C. Prime divisors and flat extensions. 83f:13001

Efroymson, Gustave A. Sums of squares in planar Nash rings. (83b:12018)

13B05 Galois theory

Dzhanelidze, G. Z. Description of a functor of finite Galois extensions for an arbitrary commutative ring. (Russian. English and Georgian summaries) 83c:13003

Cohomology of categorical objects and the Galois extension of commutative rings. (Russian. English and Georgian summaries) 83g:13001

Fogarty, John On the depth of local rings of invariants of cyclic groups. 83e:13004

Greither, Cornelius (with Haggennsiller, Rudolf) Abeliache Galoiserweiterungen von R[X]. (English summary) [Abelian Galois extensions of R[X]] 83h:13011

Haggennsiller, Rudolf See Greither, Cornelius, 83h:13011

Kersten, Ina Modulare Ringerweiterungen. [Modular extensions of rings] 83e:13008

(with Michaliček, Johannes) Kubische Galoiserweiterungen mit Normalbasis. [Cubic Galois extensions with normal basis] 83g:13002

(with Michaliček, Johannes) Galoiserweiterungen der Ordnung p mit Normalbasis. [Galois extensions of order p with normal basis] 83g:13003

Michaliček, Johannes See Kersten, Ina, 83g:13002 and 83g:13003

Nakajima, Atsushi Free algebras and Galois objects of rank 2. 83h:13012

Naylor, Lawrence W. Height one separable algebras over commutative rings. 83e:13009

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Kraft, Hanspeter Algebraische Kurven und diophantische Gleichungen. [Algebraic curves and Diophantine equations] 83c:14001
Mumford, David *Algebraic geometry. I. 83d:14002
Palais, Richard S. *Real algebraic differential topology. Part I. 83j:14001

secondary classifications:

Forster, Otto *Lectures on Riemann surfaces. (83&39046)
(Gilligan, Bruce) See Forster, Otto, (83&30046)
Holme, Audun *Introducción a la teoría de las clases características en la geometria algebraica. (Spanish) [Introduction to the theory of characteristic classes in algebraic geometry] (834:14006) 14-02 Advanced exposition (research surveys, monographs, etc.)

Fulton, William (with Lazarsfeld, Robert) Connectivity and its applications in algebraic

secondary classifications:

Bahakhanian, Ari ★Blowing up Grassmannians. (83se:14607) (Ророv, V. L.) See Springer, TomyAlbert, (83e:20002) Springer, TomyAlbert ★Теория импариантов. (Russian) [Invariant theory] (83e:20002)

14-03 Historical (must also be assigned at least one classification number from Section 01)

secondary classifications:

Conforto, Fablo Projective geometry: its historical development and significance. (Italian) (83e:51002)

Gray, Jeremy Les trois suppléments au Mémoire de Poincaré, écrit en 1830, sur les fonctions fuchsiennes et les équations différentielles. (English summary) [The three supplements to Poincaré's Mémoire, written in 1880, on Fuchsian functions and

supplements to Poincaré's Memoure, written in 1880, on Fuchsian functions and differential equations] (83g91027)

(Krull, Wolfgamg) See Nastohl, H.-J., (83k:01044b)

Mainzer, Klaus ** Geschichte der Geometrie. (German) [History of geometry] (83j:01004)

Nastohl, H.-J. Wolfgang Krulls Arbeiten zur kommutativen Algebra und ihre Bedeutung für die algebraische Geometrie. [The works of Wolfgang Krull on commutative algebra and their importance for algebraic geometry] (83k:01044b)

Neueuschwander, Erwin Über die Wechselwirkungen zwischen der französischen Schule, Riemann und Weierstraß. Eine Übersicht mit zwei Quellenstudien. [On the interaction between the Femen School. Bienann and Weierstraß. Eine Ausgeweiter with two sources.

between the French School, Riemann and Weierstrass. A survey with two source studies] (83a:91930)

(Rota, Gian-Carlo) See Study, Eduard, (R3g-01027)
(Rota, Gian-Carlo) See Study, Eduard, (R3g-01006)
Study, Eduard *Methoden zur Theorie der ternären Formen. (German) [Methods for the

theory of ternary forms] (83]:01006)
Well, André Sur les origines de la géométrie algébrique. [On the origins of algebraic geometry] (83k:01005)

14-04 Explicit machine computation and programs (not the theory of computation or programming)

secondary classifications:

Davesport, James H. Effective mathematics—the computer algebra viewpoint.
(R1ec68025)

Schnorr, C.-P. An extension of Strassen's degree bound. (83h:68054)

14-06 Proceedings, conferences, etc.

(Conte, Alberto) See Algebraic threefolds, #3j:14003 (van Oystaeyen, Freddy M. J.) See Brauer groups in ring theory and algebraic geometry, #3d:14003

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*Brauer groups in ring theory and algebraic geometry. 83a:14003

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nposium: Invariant Theory and Related Matters See Invariant theory and related matte

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Young tableaux and Schur functions in algebra and geometry. *Tableaux de Young et foncteurs de Schur en algebre et géomètrie. [Young tableaux and Schur functions in algebra and geometry] 83a:14001

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les *Séminaire sur les Singularités. (French) [Seminar on Singularities] (831:32001)

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**Topological analytical aspects of singularity theory

**Topological analytical aspects of singularity theory, (Japanese) (83d:32002)

14Axx Foundations

14A05 Relevant commutative algebra [See also 13-XX.]

Marot, Jean Sur la complétion adique des P-anneaux. (English summary) [On the adic complétion of P-rings] (83k:13004)

Nesselmann, Dieter Über aquivielfache Unterschemata lokaler Schemata. [Equimultiple subschemes of local schemes] (83g:13018)

Verschoren, Alain H. M. J. On the geometry of rings with polynomial identity. (83k-16016)

nabe, Tetsuro On the quasiconnected components of a scheme. (83a:14002)

14A10 Varieties

14A15 Schemes

Constantinescu, Adrian Some remarks on proper morphisms of schemes. 83:14003a Some remarks on proper morphisms of schemes. II. 83:14003b Watanabe, Tetsuro On the quasiconnected components of a scheme. 83a:14002

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Palais, Richard S. *Real algebraic differential topology. Part I. (83j:14001)

14A20 Generalizations (algebraic spaces, motifs)

Greco, Silvio (with Strano, Rosario) Theorems A and B for Henselian schemes. (Italian mmary) 83m:14002

(with Strano, Rosario) Quasicoherent sheaves over affine Hensel schemes.

trano, Rosario See Greco, Silvio, 83h:14001 and 83m:14002

14A25 Elementary questions

Geramita, Anthony V. (with Maroscia, Paolo) The ideal of forms vanishing at a finite set of points in Pⁿ. 83d:14004
 Hansen, Johan P. Connectedness theorems in algebraic geometry. 83g:14001
 Maroscia, Paolo See Geramita, Anthony V., 83d:14004

14A99 None of the above, but in this section

secondary classifications:

Citrini, Laura Cariboni On the arithmetic genera of an algebraic threefold. (Italian. English summary) (83a:14020)

Dubuc, Eduardo J. C¹⁰⁰ schemes. (83a:58004)

Keigher, William F. On the quasi-affine scheme of a differential ring. (83c:12023)

Sot, Richard **Simple morphisms in algebraic geometry. (83m:14001)

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schoren, Alain H. M. J. A glueing process for rings with polynomial identity.
(83h:16026)

14Bxx Local theory [See also 32Bxx.]

14B05 Singularities [See also 14E15, 32B30, 32C40, 58C27.]

nne, P. Sur les singularités cycliques quotients. [On cyclic quotient singularities]

Elkik, Renée Rationalité des singularités canoniques. [Rationality of canonical

singularities] 83a:14003 Giblin, P. J. See Soares, M. G., 83h:14004

z-Sprinberg, Gerardo (with Verdier, Jean-Louis) Points doubles rationnels et représentations de groupes. (English summary) [Rational double points and group représentations] 83f:14001

Hipps, N. (with Mount, K. R.; Villamayor, O. E.) Vertices and polarizations for homogeneous polynomials. 83k:14002

Kashiwara, Hiroko Rational functions of (0, 1)-type on the two-dimensional complex

projective space. 83j:140 breer, Horst Zum $K(\pi, 1)$ errer, Horst Zum $K(\pi,1)$ -Problem für isolierte Singularitäten von vollständigen Durchschnitten. [On the $K(\pi,1)$ -problem for isolated singularities of complete intersections] 83h:14603

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Neukirch, Jürgen Zöpfe und Galoisgruppen. [Braids and Galois groups] 83k:14002
Nobile, Augusto On certain numbers associated to isolated critical points. 83k:14004
Riemenschneider, Oswald Zweidimensionale Quotientensingularitäten: Gleichungen und
Syzygien. [Two-dimensional quotient singularities: equations and syzygies] 83e:14002
Soares, M. G. (with Giblin, P. J.) Recognizing singularities of surfaces in CP³.

83h:14604 Verdier, Jean-Jean-Louis See Gonzalez-Sprinberg, Gerardo, 83f:14001 or, O. E. See Hipps, N.; et al., 83h:14002

Zariski, Oscar Addendum to my paper: "Foundations of a general theory of equisingularity on r-dimensional algebroid and algebraic varieties, of embedding on r+1" [Amer. J. Math. 101 (1979), no. 2, 453-514; MR 81m:14005]. 836-14002

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secondary classification

Abeasis, S. (with Del Fra, A.; Kraft, Hanspeter) The geometry of representations of A... (R3b:14038

Arnol'd, V. I. On some problems in singularity theory. (83j:58011)

Arnord, V. I. On some prootens in singularity incory. (83):89312.

Brieskorn, Egbert The unfolding of exceptional singularities. (838:32020)

Cooper, Benjamin G. On the monodromy at isolated singularities of weighted homogeneous polynomials. (836:33012)

Del Fra, A. See Abeasis, S.; et al., (83h:14038)

Delorme, Charles Quelques remarques sur les courbes monomiales. [Some monomial curves] (83m:13015) ques sur les courbes monomiales. [Some remarks on

Elders, Fritz (with Lo, Kam Chan) Minimal characteristic exponent of the Gauss-Manin ection of isolated singular point and Newton polyhedron. (83j:32009)

Flemer, Hubert Divisorenklassengruppen quasihomogener Singularitäten. [Divisor class groups of quasihomogeneous singularities] (83a:13009)

Geramita, Anthony V. Some remarks on multiplicity. (83h:13034) Herrmann, M. (with Orbanz, Ulrich) On equimultiplicity. (83d:13031b)

Herrang, J. When is a regular sequence super regular? (83c:13009)

Hotta, Ryoshi On Springer's representations. (83h:20038)

Howlett, Robert B. Coxeter groups and M-matrices. (83g:20032)

Jurkiewicz, Jerzy On the complex projective torus embedding, the associated variety with corners and Morse functions. (Russian summary) (83g:14025)

Kirby, R. C. (with Scharlemann, Martin) Eight faces of the Poincaré homology 3-sphere.

(Russian) (83k:57007)

Kraft, Hanspeter Conjugacy classes and Weyl group representations. (83h:20017) See also Abeasis, S.; et al., (83h:14038)

Leahy, John V. (with Vitulli, Marie A.) Weakly normal varieties: the multicro

singularity and some vanishing theorems on local cohomology. (83a:14038)

Lê Dûng Trang Intégrales de courbure et singularités. [Integrals of curvatures and singularities] (83h:32009)

Limites d'espaces tangents et obstruction d'Euler des surfaces. [Limits of tangent spaces and Euler obstruction of surfaces] (83k:32021)

Lévy, Bernard C. See Yagle, Andrew E., (83j:93060) Lo, Kam Chan See Ehlers, Fritz, (83j:32009)

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Saito, Kyoji A characterization of the intersection form of a Milnor's fiber for a function with an isolated critical point. (83j:32010) Scharlemann, Martin See Kirby, R. C., (83k:57007)

Stone, David A. The exponential map at an isolated singular point. (83h:53041)

Teissier, Bernard Variétés polaires locales: quelques résultats. [Local polar varieties: some results] (83j:32012)

esen-type inequalities in algebraic geometry. I. Introduction to the problem. (83d:52010)

Terao, Hiroaki On Betti numbers of complement of hyperplanes. (83h:32012)
Vitulli, Marie A. See Leahy, John V., (83s:14038)
Wajnryb, Bronislaw Note on resolution of singularities of embedded algebraic varieties. (83a:14014)

Watanabe, Keilchi Some remarks concerning Demazure's construction of normal graded rings. (83g:13016)

Yagle, Andrew E. (with Lévy, Bernard C.) Multivariable root loci on the real axis. (83):93066)

Yomdin, Yosef The structure of a critical set of a complete intersection singularity.
(83m:32010) Yoshinaga, Etsuo (with Ohyanagi, Shigeki) Two-dimensional quasihomogeneous singularities of p_g = 3. (83h:14030)

14B07 Deformations of singularities [See also 14D15, 32C40, 32G05,

32G11, 32G13.1 Briançon, J. (with Galligo, A.; Granger, M.) Déformations équisingulières des germes de courbes gauches réduites. [Equisingular deformations of the germs of reduced space curves] 83::14004

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Buchweitz, Ragnar-Olaf (with Greuel, Gert-Martin) Le nombre de Milnor, équisingularité et déformations des courbes réduites. [The Milnor number, equisingularity and deformations of reduced curves] (See 83k:32001)
Galligo, A. See Briançon, J.; et al., 83k:14004
Greuel, Gert-Martin See Buchweitz, Ragnar-Olaf, (See 83k:32001)
Yano, Tannaki Flat coordinate system for the deformation of type E₆. 83k:14001
Deformation of singularities associated with unitary reflection groups. 83j:14005

Aleksandrov, A. G. Normal forms of one-dimensional quasihomogeneous complete intersections. (Russian) (83e:14022)

Elsenbud, David (with Riemenschneider, Oswald; Schreyer, Frank-Olaf) Projective resolutions of Cohen-Macaulay algebras. (83us:13008)

Higuchi, Teilchi See Tomaru, Tadashi; et al., (83k:32023)

Kato, Mitsuo The b function of a μ-constant deformation of x⁷+y⁵. (83b:32007) (with Watanabe, Satoshi) The flat coordinate system of the rational double point of E₈ type. (83e:32024)

King, Henry Churchill Topological type in families of germs. (83a:59014)

Nobile, Augusto On certain numbers associated to isolated critical points. (83a:14004)

Riemenschneider, Oswald See Eisenbud, David; et al., (83a:13008)

Saito, Hitoshi See Tomaru, Tadashi; et al., (83k:32023)

Schreyer, Frank-Olaf See Eisenbud, David; et al., (83n:13008)

Tomaru, Tadashi (with Saito, Hitoshi; Higuchi, Teiichi) Pluri-genera 8_m of normal surface singularities with C*-action. (83k:32023)

Watanabe, Satoshi See Kato, Mitsuo, (83e:32024)

14B10 Infinitesimal methods

14B12 Local deformation theory, Artin approximation, etc.

secondary classifications:

Becker, Joseph A. (with Denef, J.; Lipshitz, L.) Further remarks on the elementary

theory of formal power series rings. (83a:13013)

Cipu, Mihai (with Popescu, Dorin) Some extensions of Néron's p-desingularization and approximation. (83h:13036)

approximation. (ask:15039)
Denef, J. See Becker, Joseph A.; et al., (83a:13013)
Lipshitz, L. See Becker, Joseph A.; et al., (83a:13013)
Popescu, Dorin See Cipu, Mihai, (83b:13036)
Schappacher, Norbert Some remarks on a theorem of M. J. Greenberg. (83f:13008)
Ştefamescu, Doru A method to obtain algebraic elements over K((T)) in positive characteristic. (83i:13020)

14B15 Local cohomology [See also 32C36.]

Roberts, Paul Calvin The Grauert-Riemenschneider theorem and some homological conjectures in commutative algebra. 83h:14005

secondary classifications:

oxby, Hans-Bjern Bounded complexes of flat modules. (83e:13008)

Leahy, John V. (with Vitulli, Marie A.) Weakly normal varieties: the multicross singularity and some vanishing theorems on local cohomology. (83a:14038) Lipman, Joseph (with Sathaye, Avinash) Jacobian ideals and a theorem of

Briançon-Skoda. (83m:13001)

Menini, Claudia On the first nonvanishing local cohomology module. (Italian summary) (83k:13017)

Sathaye, Avinash See Lipman, Joseph, (83m:13001) Vitulli, Marie A. See Leahy, John V., (83a:14038)

14B20 Formal neighborhoods

14B25 Local structure of maps: étale, flat, etc. [See also 13-XX, 14E40.]

Artin, M. Local structure of maximal orders on surfaces. 83k:14003

Becker, Joseph A. Solving power series equations. II. Change of ground field. (French summary) 83c:14003

Beltrametti, Mauro (with Robbiano, Lorenzo) Normalization via monoidal transformations. 83c:14004

Ogoma, Tesushi Some examples of rings with curious formal fibers. 83d:14005

Paxia, Giuseppe On the geometrically unibranch couples. 83f:14003

Robbiano, Lorenzo See Beltrametti, Mauro, 83c:14004

Arbarello, Enrico (with Cornalba, Maurizio) On a notable property of the morphisms of a curve with general moduli into a projective space. (Italian. English summary)

Artin, M. Left ideals in maximal orders. (83):16009)
Cornalba, Maurizio See Arbarello, Enrico, (83a:14024)
Hochster, Melvin The dimension of an intersection in an ambient hypersurface.

(83g:13017)
Seydi, Hamet Sur la théorie des anneaux excellents en caractéristique p. II. [On the theory of excellent rings of characteristic p. III (83b:13006)
magawa, Mitsuo Some results on the normalization and normal flatness. (83f:13003)

14B99 None of the above, but in this section

secondary classifications:

per, servin Das Zariskische Diskriminantenkriterium und die Fortsetzung von Derivationen. (English summary) [The Zariski discriminant criterion and the continuation of derivations] (83g:13007) Richard *Simple morphisms in the formation of the company of the com Böger, Erwin Das Zariskische Diskrimi

Sot, Richard *Simple morphisms in algebraic geometry. (83m:14001)

14Cxx Cycles and subschemes

14C05 Parametrization (Chow and Hilbert schemes)

Angéniol, Bernard † Familles de cycle algébriques—achéma de Chow. (French) [Families of algebraic cycles—the Chow achema] 83m:14003

Briançon, J. (with Granger, Jean-Michel; Speder, J.-P.) Sur le schéma de Hilbert d'une courbe plane. [On the Hilbert scheme of a plane curve] 83k:14004

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Laksov, Dan See Ellingurud, G., 83k:14006

siol, Bernard (with El Zein, Found) La classe fondamentale relative d'un cycle.

[The relative fundamental class of a cycle] (See 83k:32001)

Barlet, Daniel *Déformations d'ordre 1 de cycles analytiques. (French) [First-order deformations of analytic cycles] (83g:32021)

El Zein, Fouad See Angeiniol, Bernard, (See Sik:32001)

Kleiman, Steven L. See Kleppe, Hans, (83f:14027)

Kleppe, Hans (with Kleiman, Steven L.) Reducibility of the compactified Jacobian.

14C10 Equivalence relations

Kleiman, Steven L. Multiple-point formulas. I. Iteration. 83j:14006 Tanaka, Tatsuji A note on 1-cycles on an abelian variety. 83m:14004

secondary classifications:

Maltsiniotis, Georges Le théorème de Brill-Noether (d'après P. Griffiths, J. Harris, G. Kempf, S. Kleiman et D. Lakaov). [The Brill-Noether theorem (after P. Griffiths, J. Harris, G. Kempf, S. Kleiman and D. Laksov)] (83k:14019) Newstead, P. E. Real classification of complex conics. (83a:14026)

14C15 Rational equivalence rings

Colliot-Thélène, Jean-Louis (with Sansuc, Jean-Jacques; Soulé, Christophe) Quelques théorèmes de finitude en théorie des cycles algébriques. (English summary) [Some finiteness theorems in the theory of algebraic cycles] 83h:14007

Ilori, Samuel A. (with Ingleton, Aubrey W.) Tangent flag bundles and Jacobian varieties. III. (Italian summary) 83a:14605b

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secondary classifications:

Józefiak, T. (with Lascoux, Alain; Pragacz, P.) Classes of determinantal varieties associated with symmetric and skew-symmetric matrices. (Russian) (83h:14044) scoux, Alain See Józefiak, T.; et al., (83h:14044)

Okamoto, Mariko On a certain decomposition of 2-dimensional cycles on a product of two algebraic surfaces. (83a:14006)

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14C17 Intersection theory

Holme, Audun *Introducción a la teoría de las clases características en la geometria algebraica. (Spanish) [Introduction to the theory of characteristic classes in algebraic geometry] 83d:14006

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Bort, Samuel A. (with Ingleton, Aubrey W.) Tangent flag bundles and Jacobian varieties.
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Oda, Tadao Geometry of convex bodies and algebraic geometry. (Japanese) (83f:14010)

14C20 Divisors, linear systems,

Bădescu, Lucian On ample divisors. 83j:14008

rescut, Luctum On ample divisions. September 2015. September 2015. Accurate the control of the control of the control of the pluricanonical linear systems of a variety of general type of dimension d. [English summary] [On the fixed part of the pluricanonical linear systems of a variety of general type of dimension d.] 83::14665

Chiantini, Luca On some algebraic and geometric extension of the theory of adjoints.

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Consulta, Maurizio A remark on the topology of cyclic coverings of algebraic varieties.

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Dolgachev, Igor (with Libgober, Anatoly) On the fundamental group of the complement to a discriminant variety. 83k:14006

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Eisenbud, David (with Van de Ven, A.) On the normal bundles of smooth rational space

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Bulum, Alexandru Weighted projective spaces as ample divisors. (83a:14639)
Fujita, Takao Vector bundles on ample divisors. (83j:14013)
Impossibility criterion of being an ample divisor. (83h:14010)
Harris, Joseph Daniel Theta-characteristics on algebraic curves. (83m:14022)
Heinzer, William See Moh, T. T., (83h:14027)

Rempf, George R. Torsion divisors on algebraic curves. (83e:14019)
Macdonald, I. G. Polynomial functors and wreath products. (83j:15023)
Moh, T. T. (with Heinzer, William) On the Lüroth semigroup and Weierstrass canonical divisors. (83k:14027)

Mohan Kumar, N. Rational double points on a rational surface. (83g:14016)

Ughi, Emaruela A remark about a criterion for factoriality. (Italian. English summary)

(83k:13009)

Verschoren, Alain H. M. J. Corrigendum: "On the Picard group of a Grothendieck category" [Comm. Algebra 8 (1980), no. 12, 1169-1194; MR 81j:18017]. (83i:18018)
Viehweg, Eckart Vanishing theorems. (83i:14011)

14C21 Webs, nets [See also 53A60.]

Scott, Leonard L. Hecke actions on Picard groups and class groups. 83b:14003

secondary classifications:

Edge, W. L. A specialised net of quadrics having self-polar polyhedra, with details of the five-dimensional example. (83h:51022)
Tyurin, A. N. A local invariant of a Riemannian manifold. (Russian) (83f:53034)

Buium, Alexandru Sur les variétés dont le nombre de Picard est égal à 1. (English nary) [On varieties whose Picard number is equal to one] 83f:14004 Shioda, Tetsuji On the Picard number of a complex projective variety. 83i:14005

secondary classifications:

Anderson, David F. Seminormal graded rings. II. (83a:13006)
Bingener, Jürgen (with Storch, Uwe) Zur Berechnung der Divisorenklassengruppen kompletter lokaler Ringe. [On the computation of the divisor class groups of complete local rings] (83m:13017)

Storch, Uwe See Ringener, Jürgen, (83m:13017)

14C25 Zero-cycles

Bloch, Spencer On the Chow groups of certain rational surfaces. 83e:14006

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14C30 Transcendental methods. Hodge theory [See also 32125]

Carlson, James A. (with Clemens, C. Herbert; Morgan, J.) On the mixed Hodge structure associated to π₃ of a simply connected complex projective manifold. 83g:14002

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Strickland, Elisabetta The symplectic group and determinants. (83k:20045)
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theory of ternary forms] (83j:01086)

kdi, V. E. Projective invariant Demazure models. (Russian) (83k:14013)

Wachs, Michelle Ser Björner, Anders, (80:20043)

Watnabe, Jumo An application of the structure theorem of height two perfect ideals to invariant theory. (83:15019)

Watanabe, Kelichi (with Watanabe, Masayuki) The classification of Fano 3-folds with torus embeddings. (83m:14029)

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14L35 Classical groups (geometric aspects)

secondary classifications:

Józefiak, T. (with Pragacz, P.; Weyman, J.) Resolutions of determinantal varieties and tensor complexes associated with symmetric and antisymmetric matrices. (83j:14044)

Pragacz, P. Ser Júzeflak, T.; et al., (83j:14044)

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14L40 Other algebraic groups (geometric aspects)

Shpir, G. B. Transformations that admit a separable rational invariant. (Russian) 83:14043

secondary classifications:

James, Donald G. Homomorphisms of unitary groups. (R3a:10036)

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Nisnerich, E. A. Arithmetic and cohomology invariants of semisimple group schemes and compactifications of locally symmetric spaces. (Russian) 83e:14035

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Shpix, G. B. Algebraicity of the automorphism groups of some geometric objects. (Russian) (834:20003)

Snow, Dennis M. Reductive group actions on Stein spaces. (834:33026)

14Mxx Special varieties

14M05 Varieties defined by ring conditions (factorial, Macaulay)

Kustin, Andrew R. (with Miller, Matthew) A general resolution for grade four Gorenstein

ideals, 83g:14026

Leshy, John V. (with Vitulli, Marie A.) Weakly normal varieties: the multicross singularity and some vanishing theorems on local cohomology. 83a:14638

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Canazza, Enrica Cubic hypersurfaces of P_k having some surfaces on them that are contact theoretic complete intersections. (Italian, English and French summaries) (83±14022)

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es, David Hilbert functions and pseudorational local rings of dimension two. (834:13032)

borts, Paul Calvin The Grauert-Riemenschneider theorem and some homological conjectures in commutative algebra. (83k:14605) imagawa, Milesuo Some results on the normalization and normal flatness. (83f:13603) anley, Richard P. See Björner, Anders, et al., (83t:06001) atanabe, Junzo An application of the structure theorem of height two perfect ideals to

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14M07 Low-codimension problems [See also 14Cxx.]

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14M10 Complete intersections

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as and their associated division ideals. (Italian. English summary) 83m:14040

Maroscia, Paolo Some remarks on varieties which are complete intersections. (Italian. English summary) 83&14929

Moh, T. T. A result on the set-theoretic complete intersection problem. 83j:14043

Valla, Giuseppe On determinantal ideals which are set-theoretic complete intersections.

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Bidescu, Lucian On ample divisors. (83j:14008)
Craighero, P. C. (with Gattazzo, Remo; Ronconi, M. C.) Cubic surfaces of A²_C with set-theoretic complete intersection curves. (Italian. English summary) (83i:14027)

A remark on the Cremona curve of P³_δČ: (λμ³,λ³μ,λ⁴,μ⁴). (Italian. English ary) (83k:14032)

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Gattazzo, Remo The normal elliptic curve $\mathcal{C}_n \subset P_n^{*-1}$, n > 4, is a set-theoretic complete intersection of n - 2 hypersurfaces. (Italian. English summary) (83e:14022)

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Gitler, Sassual Complete intersections. (Spanish) (83i:57023)

Libgober, Anatoby (with Wood, John W.) On the topological structure of even-dimensional complete intersections. (83e:57017)

Marot, Jean Sur les homomorphismes d'intersection complète. (English summary) [On homomorphisms of complete intersection] (83e:13025)

Roncosi, M. C. See Craighero, P. C.; et al., (83i:14027)

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Watanabe, Keilchi Invariant subrings of finite groups which are complete intersections.

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Weslier, Joachim Deformation of complete intersections with singularities. (83g:32022)
Wood, John W. Complete intersections. (83g:57024)
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14M12 Determinantal varieties

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(with Lascoux, Alain; Pragacz, P.) Classes of determinantal varieties associated with symmetric and skew-symmetric matrices. (Russian) 83h:14044

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Andrade, José F. Regular sequences of minors. II. (83m:13014)
Catanese, F. Babbage's conjecture, contact of surfaces, symmetric determinantal varieties and applications. (83c:14026)
Hazewinket, Michiel (with Perdon, Anna-Maria) On families of systems:
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14M15 Grassmannians, Schubert varieties [See also 51M35.]

De Concini, Corrado (with Lakshmibai, V.) Arithmetic Cohen-Macaulayness and arithmetic normality for Schubert varieties. 83e:14035

Havlicek, Hans Zur Theorie linearer Abbildungen. I, II. (English summary) [On the

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k-Räumen auf einer nicht-ausgearteten 2k-Quadrik besteht. [The homology groups of the manifold which consists of the linear k-spaces on a nondegenerate 2k-quadric]

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Andersen, Henning Haahr On the structure of the cohomology of line bundles on G/B. (83a:14016)

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Kirwan, Frances Sur la cohomologie des espaces quotients. (English summary)

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Kraft, Hanspeter Conjugacy classes and Weyl group representations. (83h:20017)

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Maeda, Sadahiro (with Shimizu, Yasuhiro) Imbedding of a complex projective space (45fined by moreowist) of same designed.

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Markushevich, D. G. Numerical invariants of families of lines on some Fano varieties. (Russian) (83e:14024)

rtin, Clyde F. Flag manifolds and group representations for linear systems. (83e:93010)

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Wang, Bo Ying Some necessary and sufficient conditions satisfied by decomposable sors in Grassmann spaces. (83e:15026)

14M17 Homogeneous spaces [See also 32M10, 53C30, 57T15.]

Schützenberger, Marcel-Paul Polynômes de Schubert. (English summary) [Schubert polynomials] 83e:14039

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Akyildiz, Ersan Bruhat decomposition via G_m-action. (Russian summary) (83a:14035)
Baclawski, Kenneth Combinatorics: trends and examples. (83f:06003)
Glover, Henry H. (with Homer, William D.) Self-maps of flag manifolds. (83b:55009)

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Bori, Samuel A. A characterisation of symmetric functions. (Italian summary)

Intersection formulae in flag manifolds. (83e:57018)

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Voskresenskii, V. E. Projective invariant Demazure models. (Russian) (83k:14013)

14M20 Rational varieties

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Del Centina, Andrea Eler

O Centina, Andrea Elementary examples of nonunirational completely regular 3-folds of elliptic type. (Italian. English summary) (83a:14033)

mazure, Michel Caractérisations de l'espace projectif (conjectures de Hartshorne et de Frankel) (d'après Shigefumi Mori). [Characterizations of projective space (conjectures of Hartshorne and Frankel) (after Shigefumi Mori)] (83a:14009)

liar, János Higher-dimensional Fano varieties of large index. (Russian. English

Kollar, Janos Higher-dime

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Levine, Marc N. Some examples from the deformation theory of ruled varieties.

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secondary classifications:

ri, Samuel A. (with Ingleton, Aubrey W.) Tangent flag bundles and Jacobian varieties.

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Ishida, Masa-Nori (with Oda, Tadao) Torus embeddings and tangent complexes. (83c:14009)

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14Nxx Classical methods and problems [See also 51-XX.]

14N05 Projective techniques

Dočkal, Ljerka Normalenkomplex der Flächen einer Flächenschar 2. Grades. (Serbo-Croatian summary) [Normal complex of surfaces of a second-order pencil of surfaces] 83e:14041

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Drechsler, Konred (with Sterz, Ulrich) Charakteristiken und Schnittzahlformeln für p-l-s-Kegelschnitte. [Characteristics and intersection formulas for p-l-s-conics]

(with Sterz, Ulrich) Vervollständigung von Kegelschnittmengen. [Completion of sets of conic sections] (83k:14009)

ngsrud, G. (with Laksov, Dan) The normal bundle of elliptic space curves of degree 5. (83h:14006)

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Generalized Plücker formulae. (83):14047)

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14N10 Enumerative problems

Hartl, Johann Die Maximalerzeugenden der projektiven Quadriken. [The maximal generators of projective quadrics] 83m:14043

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Le Barz, Patrick Formules pour les multisécantes des surfaces. (English summary) [Formulas for the multisecants of surfaces] 83c:14036

Roberts, Joel (with Speiser, Robert) Schubert's enumerative geometry of triangles from a modern viewpoint. 83k:14049

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Zariski, Oscar Dimension-theoretic characterization of maximal irreducible algebraic

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secondary classifications:

Bertin, José (with Sols Lucia, Ignacio) Quelques formules énumératives concernant les fibrés vectoriels sur P'. (English summary) [Some enumerative formulas about vector bundles on P'] (83c:14011)

Gieseker, D. Stable curves and special divisors: Petri's conjecture. (83±14024) Kleiman, Steven L. Multiple-point formulas. I. Iteration. (83±14006)

Piene, Ragni Cuspidal projections of space curves. (83):14023)
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secondary classifications:

Gross, Benedict H. (with Harris, Joseph Daniel) Real algebraic curves. (83a:14028) Harris, Joseph Daniel See Gross, Benedict H., (83a:14028) Popov, V. L. Constructive invariant theory. (83i:14040)

15-XX LINEAR AND MULTILINEAR ALGEBRA; MATRIX THEORY (finite and infinite)

15-01 Elementary exposition, textbooks

Balestra, Pietro *Calcul matriciel pour économistes. (French) [Matrix calculus for sts] 83i:15001

rger, Y.) See Schwartz, Laurent, 83k:15003

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Bloom, David M. *Linear algebra and geometry, 83a:15001

(Bourguignon, Jean-Pierre) See Schwartz, Laurent, 83k:15003

Cremarenco, S. Applications of matrix theory. (Romanian) 83e:15001

Elseureich, Ginther *Lineare Algebra und analytische Geometrie. (German) [Linear algebra and analytic geometry] 83e:15001

Eves, Howard *Eleme tary matrix theory. 834:15001

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Manteuffel, Karl (with Seiffart, Egon; Vetters, Klaus) *Lineare Algebra. (German) [Linear algebra] 83k:15002

Mirsky, Leonid *An introduction to linear algebra. 83f:15001
Schwartz, Laurent *Les tenseurs. (French) [Tensors] 83k:15003
Searle, Shayle R. *Matrix algebra useful for statistics. 836:15002

Seiffart, Egon See Manteuffel, Kark; et al., 83k:15002 Vetters, Klaus See Manteuffel, Kark; et al., 83k:15002 Voevodin, V. V. */Inneknan aurectpa. (Russian) [Linear algebra] 83e:15002

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Goodbody, A. M. *Cartesian tensors: with applications to mechanics, fluid mechanics and elasticity. (83k:73002)

Jarvines, Richard D. *Finite- and infinite-dimensional linear spaces. (83k:46001)
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(Rassias, Themistocles M.) See Järvinen, Richard D., (83k:46001)
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Scheja, Günster (with Storch, Uwe) *Lehrbuch der Algebra. Teil 3. (German) [Textbook of algebra. Part 3] (834:00005)

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15-02 Advanced exposition (research surveys, monographs, etc.)

Cain, B. E. Corrections to: "Inertia theory" [Linear Algebra Appl. 30 (1980), 211–240; MR 82c:15001]. 83h:15001

Graham, Alexander ★Kronecker products and matrix calculus: with applications. 83g:15001

Johnson, Charles R. Some outstanding problems in the theory of matrices. 83k:15003 (LI, Jiong Sheng) See Plemmons, R. J., 83c:15002

Neumann, Michael (with Plemmons, R. J.) M-matrix characterizations. II. General

M-matrices. 83a:15002

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See also Neumann, Michael, 83x15002

Vein, P. R. A short survey of some recent applications of determinants. 83x15003

secondary classifications:

Fuhrmann, Paul A. Functional models, factorizations and linear systems. (83k:47001)

Kato, Tosio *A short introduction to perturbation theory for linear operators.

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Taussky, Olga Some facts concerning integral representations of ideals in an algebraic number field. (83f:15009)

15-03 Historical (must also be assigned at least one classification number from Section 01)

(Gauss, Carl Friedrich) See Robinson, Donald W., (83b:01046)
Robinson, Donald W. Gauss and generalized inverses. (German summary) (83b:01046)
(Rota, Gian-Carlo) See Study, Eduard, (83j:01086)
Study, Eduard ★Methoden zur Theorie der ternåren Formen. (German) [Methods for the

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15-04 Explicit machine computation and programs (not the theory of computation or programming)

Campbell, J. A. (with Gardin, F.) Transformation of an intractable problem: evaluation of a determinant in several variables. (See 83k:68003)

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Pan, V. Ya. Fast matrix multiplication without APA-algorithms. 83:15002

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Afolabi, M. O. An algorithm for inversion of a matrix with polynomial entries.
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Kallman, Ralph A method for finding permanents of 0, 1 matrices. (83d:15002)

Lenz, Charles E. Modeling the matrix of Albrecht Dürer. (83e:01016)

Pan, V. Ya. The bit-operation complexity of approximate evaluation of matrix and polynomial products using modular arithmetic. (83g:68065)

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15-06 Proceedings, conferences, etc.

secondary classifications:

nvariant theory and related matters *Invariant theory and related matters. (Japanese) (83c:14002)

Invariant The

ory and Related Matters See Invariant theory and related mat (83c:14002)

15A03 Vector spaces, linear dependence, rank

Anderson, T. W. (with Styan, George P. H.) Cochran's theorems, rank additivity and tripotent matrices. 83k:15002

finite-dimensional vector spaces. (Italian) 83k:15003

Bors, Dan Sur une définition des espaces géométriques. (Romanian summary) [On a definition of geometric spaces] 83k:15004

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Chobanov, Ivan See Khristova, Ivanka, 83\(\text{k}\)15005
Garrushenko, E. V. (with Prupis, V. N.) The stability of bases in finite-dimensional vector spaces. (Russian) 83\(\text{k}\)15004
Khristova, Ivanka (with Chobanov, Ivan) Gibbs vectors in three-dimensional vector spaces over ordered fields. (Bulgarian summary) 83\(\text{k}\)15005
Kravchenko, A. A. The minimal number of generators of the lattice of subspaces of a finite-dimensional linear space. (Russian) 83\(\text{k}\)15003
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Zha, Jian Lu The Schein rank of a fuzzy matrix. (Chinese. English summary) 83\(\text{k}\)15004

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Carlson, Donald E. A mathematical theory of physical units, dimensions, and measures.

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Marcu, Dáraij On certain vector spaces associated to the oriented finite graphs.
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nidt, G. C. Hermite normal forms and the rank of a matrix. (83h:15013) witezyński, Krzysztof On some properties of the characteristic of a projective transformation. (83):51002)

15A04 Linear transformations, semilinear transformations

Beasley, LeRoy B. Linear transformations which preserve fixed rank. 83c:15004 Lautemann, Clemens Linear transformations on matrices: rank preservers and determinant preservers (note). 83a:15003

Mitra, Sujit Kumar (with Puri, Madan L.) Shorted matrices—an extended concept and

some applications. 83e:15003

Simultaneous diagonalization of rectangular matrices. 83k:15004

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Tam, Bit Shun On the semiring of cone preserving maps. 83i:15006

Troftmov, O. E. See Zhirnov, V. T., 83m:15001

Zhirnov, V. T. (with Trofimov, O. E.) Fast linear transformations of a plane. (Russian)

secondary classifications:

Davis, Richard Andrew More on similarity of matrices. (83k:15011)

Dawlings, R. J. H. Products of idempotents in the semigroup of singular endomorphisms of a finite-dimensional vector space. (83e:20069)

Pressman, I. Canonical rotation matrices of Hessenberg form and linear programming. (83a:90095)

Soltan, V. P. Structure of hyperinvariant subspaces of a real finite-dimensional operator.
(Russian) (83):15014)
Watkins, William Linear transformations that preserve a similarity class of matrices.

Witezyński, Krzysztof On some properties of the characteristic of a projective transformation. (83):51002)

15A06 Linear equations

Chatelin Laborde, Françoise (with Miranker, Willard L.) Acceleration by aggregation of successive approximation methods. 83m:15002

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Fiedler, Miroslav (with Merris, Russell) Irreducibility of associated matrices. 83a:15018
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Makokha, A. N. Linear operators that are connected with a trivector of type (887;520) and the basic group of automorphisms of that trivector. (Russian) \$3e:15025
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Micali, Artibano (with Paques, A.) Le groupe des algèbres quadratiques. [The group of quadratic algebras] (83m:10027)
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Hawidi, H. M. Scalar angles in n-dimensional vector space. (Arabic summary) 83b:15025

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Schwarz, Binyamin (with Zaks, Abraham) Matrix M Zaks, Abraham See Schwarz, Binyamin, 83d:15023 nin (with Zaks, Abraham) Matrix Möbius transformations. 83d:15023

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Bachem, Achim (with Korte, Bernhard) On the RAS-algorithm. (German summary)

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16-01 Elementary exposition, textbooks

Kasch, F. ★Modules and rings. 83i:16001

Lidl, Rudolf (with Wiesenbauer, Johann) ★Ringtheorie und Anwendungen. (German)

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16-02 Advanced exposition (research surveys, monographs, etc.)

Markov, V. T. (with Mikhalev, A. V.; Skornyakov, L. A.; Tuganbaev, A. A.) Modules.

(Russian) 83a:16001 Mikhalev, A. V. See Markov, V. T.; et al., 83a:16001 Skornyakov, L. A. See Markov, V. T.; et al., 83a:16001 Tuganbaev, A. A. See Markov, V. T.; et al., 83a:16001

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- 16-03 Historical (must also be assigned at least one classification number from Section 01)
- 16-04 Explicit machine computation and programs (not the theory of computation or programming)

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Alder, A. (with Strassen, V.) The algorithmic complexity of linear algebras. (83g:68057) Strassen, V. See Alder, A., (83g:68057)

16-06 Proceedings, conferences, etc.

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Brungs, H. H. (with Torner, G.) Right chain rings and the generalized semigroup of divisibility. (82e:16004)

Dauns, John Generalized skew polynomial rings. (83g:16002)

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ie, Marc Sur une question de L. Lesieur. [On a question posed by L. Lesieur]

Smith, S. P. An example of a ring Morita equivalent to the Weyl algebra A1. (83a:16004)

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hamarie, Marc Anneaux de polynômes et ordres maximaux. (English summary)
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Ahmar, A. Anneaux de polynômes de Ore sur des anneaux de Jacobson. [Ore polynomial rings on Jacobson rings] 83e:16003
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Block, Richard E. The irreducible representations of the Lie algebra \$1(2) and of the Weyl algebra. (83c:17010)

Burkov, V. D. Derivations of polynomial rings. (Russian. English summary) (83d:16035) Cortzen, Barbara Finitistic dimensions of ring extensions. (83h:16034) DeMeyer, F. R. (with Ford, T. J.) On the Brauer group of superspaces and subrings of

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Donesta, Alfred Complements sur les extensions hexaphiques. (English summary) [Complements on hexaphic extensions] (83h:12035)

Farkas, Daniel R. (with Snider, Robert L.) Commuting rings of simple A(k)-modules.

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Ferrero, Miguel (with Kishimoto, Kazuo) A classification of abelian extensions of rings. (83b:16020)

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16A06 Free algebras, free ideal rings (firs) and their generalizations [See also tensor algebra in 15A72.]

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Dicks, Warren A commutator test for two elements to generate the free algebra of rank two. 83g:16005

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secondary classifications:

Cohn, P. M. (with Schofield, A. H.) On the law of nullity. (83h:16004)
Faizov, S. K. Free products of catanonics. Fairov, S. K. Free products of categories and inverting functors. (Russian)
Nakajima, Atsushi Free algebras and Galois objects of rank 2. (83h:13012)
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Roers, A. H. Duplication of algebras. 83k:17022 Lyubich, Yu. I. Classification of some types of Bernstein algebras. (Russian) 83e:17021

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(with Barakat, Richard) An algorithm for gene frequency changes for linked autosomal loci based on genetic algebras. (83a:92031)

Heuch, Ivar An explicit formula for frequency changes in genetic algebras. (83e:92041)

The genetic algebra for polyploidy with an arbitrary amount of double reduction. (83a:92032)

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Holgate, Philip Selfing in genetic algebras. (83b:92037)

Wörz-Busekros, Angelika Polyploidy with an arbitrary mixture of chromosome and chromatid segregation. (83b:92051)

Relationship between genetic algebras and semicommutative matrices. (83a:92036)

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h, Mohamed Lamei (with Micali, Artibano) Sur les algèbres normées sans eurs topologiques de zèro. [On normed algebras without topological zero divisors] El-Mallah, Moha 831-17024

Enescu, Ion Sur une algèbre réelle non sociative (Romanian summary) [On a ciative real algebra] 83d:17012

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mu (with Osborn, J. Marshall) Algebras with nondegenerate associative symmetric bilinear forms permitting composition. II. (83::17001)
Osborn, J. Marshall See Okubo, Susumu, (83::17001)

18-XX CATEGORY THEORY, HOMOLOGICAL ALGEBRA

18-01 Elementary exposition, textbooks

secondary classifications:

Benenti, Sergio (with Tulczyjew, Włodzimierz M.) Binary linear relations among

18-02 Advanced exposition (research surveys, monographs, etc.) secondary classifications:

(Ehresmann, Andrée Charles) See Ehresmann, Charles, (83e:01090a) and (83e:01090b) Ehresmann, Charles Oeuvres completes et commentées. III-1. Catégories structurées et quotients. [Complete and annotated works. III-1. Structural categories and quotients]

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Mac Lane, Saunders History of abstract algebra: origin, rise, and decline of a movement.

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18-04 Explicit machine computation and programs (not the theory of computation or programming)

18-06 Proceedings, conferences, etc.

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18A05 Definitions, generalizations

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Tholen, Walter Birkhoff's theorem for categories. (83f:08021)

18A10 Graphs, diagram schemes, precategories, neocategories [See also 20Lxx.1

Leroux, Pierre The isomorphism problem for incidence algebras of Möbius categories. 83a:18002

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Roller, A. V. Matrix problems and representations of BOCSs. (Russian) (83b:16027)

18A15 Foundations, relations to logic and deductive systems [See also 03-XX.]

Pasini, Antonio On a definition of first order translation for a concrete category.

Tsukada, Harue Category theory not based upon set theory. 83d:18001

secondary classifications:

Babaer, A. A. Equality of morphisms in closed categories. (Russian. English and Azerbaijani summaries) (83d:18007) Equality of morphisms in closed categories. II. (Russian. English and Azerbaijani

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Lambek, J. (with Scott, P. J.) Independence of premisses and the free topos. (83e:03098)

Lopez-Escobar, E. G. K. Equivalence between semantics for intuitionism. I. (83k:03075)

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Thibault, Marie-France Prerecursive categories. (83f:03040)

18A20 Epimorphisms, monomorphisms, special classes of morphisms, null morphisms, factorization (bicategories)

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Algebren—Kennzeichnung von (Homo) Morphismenklassen. (German) [Factorization
systems in the category of partial algebras—characterization of (homo) morphism The epis of Pos(Z). (83i:06005)

18A22 Special properties of functors (faithful, full, etc.)

Harvey, J. M. A note on topological hom-functors. 83m:18002 McDill, J. M. Factorization of functors having left adjoints. 83g:18001

18A23 Natural morphisms, dinatural morphisms secondary classifications:

Moszyńska, Maria (with Pleszczyńska, Elżbieta) Equivalence relations for statistical

spaces. German and Russian summaries) (805:60005)

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Struckmann, Werner Ser Watjen, Dietmar, (836:60009)

Watjen, Dietmar (with Struckmann, Werner) An algorithm for verifying equations of morphisms in a category. (83g:68009)

18A25 Functor categories, comma categories secondary classifications:

Hiller, Howard L. Injectives in arrow categories. (83m:19014)

18A30 Limits and colimits (products, sums, directed limits, pushouts, fiber products, equalizers, kernels, ends and coends, etc.)

Assem, I. A. See Chehata, C. G., 83b:18004
Chehata, C. G. (with Assem, I. A.) Functorial properties of the mixed limit functors.
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Hien, Bui Huy (with Németi, István) Problems with the category theoretic notions of

ultraproducts. 83a:18004 ar, H. V. Coproduct and initial objects of fibre categories. 83b:18005

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Berenguer, X. See Harper, L. H., (#3e:68006)
Dayton, Barry H. (with Weibel, Charles A.) A spectral sequence for the K-theory of

Dayton, Barry H. (with Weiter, Charles A.) A spectral sequence for the A-theory of affine glued schemes. (83e:13014)

Glerz, Gerhard Colimits of continuous lattices. (83h:06019)

Harper, L. H. (with Berenguer, X.) The global theory of paths in networks. I. Definitions, examples and limits. (83e:68086)

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18A32 Factorization of morphisms (via images, coimages, dominions, codominions), substructures, quotient structures, congruences, amalgams

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Conte, Giuseppe Symmetrizations of categories and categories of relations. (83a:18006)

18A35 Categories admitting limits (complete categories), functors commuting with limits, continuous functors, completions

Adamek, Jiří (with Koubek, Václav) Completions of concrete categories. 83g:18003 (with Strecker, George E.) On the largest initial completion of categories of algebras. 83g:18002

Berger, Reinhard (with Tholen, Walter; Wischnewsky, Manfred B.; Wolff, Harvey)
Compact and hypercomplete categories. 83a:18005
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Fairov, S. K. Categories of free ideals. (Russian) (83b:16002)

18A40 Adjoint functors (representable functors, universal constructions, reflective subcategories, reflections, etc.), constructions of adjoints (Kan extensions, etc.)

Giuli, Eraldo Relations between reflective subcategories and shape theory.
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Irfan, M. On adjointness of comma categories. (Turkish summary) 83j:18004

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Bautista Ramos, Raymundo (with Colavita, L.; Salmerón, L.) On adjoint functors in representation theory. (83g:18016)
Calder, Allan (with Siegel, Jerrold) A note on Čech and Kan extensions of homotopy functors. (83k:55007)

Cerruti, Umberto A categorical point of view in fuzzy theories. (83f:03052)
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Frei, Armin On the preservation of homotopy invariance by Kan extensions. (83e:55006)
Jambor, Paul (with Malcolmson, Peter; Shapiro, Jay) Localizations and colocalizations via limits. (83i:16007)

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Adamek, Jiří (with Strecker, George E.) Construction of Cartesian closed topological hulls. (83a:18017)

(with Koubek, Václav; Reiterman, Jan) Embeddings into categories with fixed points in representations. (834:18002)

m, Peter J. Groupes relatifs et espaces relatifs. [Relative groups and relative spaces]

Kanda, Akira Constructive category theory. (83e:03068)
Koubek, Václav See Adámek, Jiří; et al., (83d:18002)
Reiterman, Jan See Adámek, Jiří; et al., (83d:18002)
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Tholen, Walter Injective objects and cogenerating sets. (83m:08013)
Vinárek, Jiří On subdirect irreducibility and its variants. (83h:08010)

18Bxx Special categories

18B05 Category of sets, characterizations [See also 03-XX.]

18B10 Category of relations, additive relations

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Antohe, St. (with Olaru, Elefterie) Signed graphs homomorphism. (German and Romanian summaries) (83m:05057) See also Olaru, Elefterie, (83m:05062)

Herrera Miranda, Jorge Les théories convexes de Horn. (English summary) [Convex Horn theories] (83k:03038)

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Pultr, Ale's On the size of conjunctive representations of n-ary relations. (83e:04005)
Zellkovskii, A. Z. (with Le Tkhuk Zuk) Categories of contractions of graphs. (Russian)

18B15 Imbedding theorems, universal categories [See also 18E20.]

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18B20 Categories of machines, automata, operative categories [See also 03D05, 68Dxx, 68F10.]

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Bahamonde, Antonio Categorical model for systems that vary in time, machines in functorial categories. (Spanish. French summary) 83::18004

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Beynon, W. M. On the structure of free finite state machines. (83b:68067) Bozapalides, Syméon (with Firarides, Anestis) Automata and categories. (83):68062)

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18Cxx Categories and algebraic theories

18C05 Equational categories [See also 03-XX, 08C05.]

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18C15 Triples (= standard construction, monad or triad), algebras for a triple, homology and derived functors for triples [See also 18Gxx.]

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18D35 Structured objects in a category (group objects, etc.)

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18E10 Exact categories, abelian categories

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18E20 Imbedding theorems [See also 18B15.]

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18E40 Torsion theories, radicals [See also 13D30, 16A63.]

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18F05 Local categories and functors

18F10 Grothendieck topologies [See also 14F20.]

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18F15 Abstract manifolds and fiber bundles [See also 55Rxx, 57Pxx.] secondary classifications:

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18F25 Algebraic K-theory and L-theory [See also 10Cxx, 12-XX, 13D15, 14Cxx, 16A54, 57R65, 57R67.]

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Sherman, Clayton K'-theory of Northerian schemes. 83e:18008
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Riemann-Roch theorems for higher algebraic K-theory. (83m:14013)

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Roberts, Leslie G. (with Weibel, Charles A.) K₂ and K₃ of the circle. (83k:14019)

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On higher p-adic regulators. (83b:12013)

Tulenbaev, M. S. The Steinberg group of a polynomial ring. (Russian) (83c:13007) Vaserstein, L. N. On the normal subgroups of GL, over a ring. (83c:20058)

Weibel, Charles A. Nilpotence and K-theory. (83b:16019) K-theory and analytic isomorphisms. (83b:13011) See also Dayton, Barry H., (83e:13014) and Rober

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Butler, M. C. R. Grothendieck groups and almost split sequences. 83k:18007

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Liu, Mu Lan The group $G_1(R\pi)$ for π a finite abelian group. (83):16031) Macdonald, I. G. Polynomial functors and wreath products. (83):15023)

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18Gxx Homological algebra [See also 55Uxx.]

Van Osdol, D. H. Long exact sequences in the first variable for algebraic cohomology theories. 83g:18024

18G05 Projectives and injectives [See also 13C10, 13C11, 16A50, 16A52.]

Hiller, Howard L. Injectives in arrow categories. 83m:18014 Porst, Hans-E. Characterization of injective envelopes. 83d:18017

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Lubkin, Saul A formula for lim . 83m:18015

Waner, Stefan A generalization of the cohomology of groups. 83i:18021

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Glenn, Paul G. Realization of cohomology classes in arbitrary exact categories.
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Hiller, Howard L. Injectives in arrow categories. (R3m: 18014)
Howie, James (with Schneebeli, Hans Rudolf) Permutation modules and projective resolutions. (R3h: 20010)
Katamastee, R. D. Hochschild cohomology of profinite groups. (Russian. English and

Georgian summaries) (83k:20049)
Okuyama, Hiroshi (with Sakuma, Motoyoshi) On the homogeneous Golod ideal of a

semigraded local ring. (83h:13024)
Ossowski, Piotr Derived functors of lim and abelian Ab3*- and Ab4*-categories with

enough injectives. (83s:18018)

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Smith, Justin R. Group cohomology and equivariant Moore spaces. (83k:29046)

18G15 Ext and Tor, generalizations, Künneth formula [See also 55U25.]

Lady, E. L. Relations between Hom, Ext, and tensor product for certain categories of modules over Dedekind domains. 83h:18008

Leech, Jonathan Extending groups by monoids. 83f:18014

Robinson, Alam Torsion products as homotopy groups. 83f:18015

secondary classifications:

Jurchescu, Martin (with Tancredi, Alessandro) On transversality in complex analytic geometry. (Italian. English summary) (83g:32012)
 Paschke, William L. EXT-groups as K-groups. (See 83j:46004a)
 Tancredi, Alessandro See Jurchescu, Martin, (83g:32012)

Triffaj, Jan E-rings and differential polynomials over universal fields. (83g:16051)

Zvyagina, M. B. On an isomorphism of one-variable Ext functors. (Russian) (83g:16052)

18G20 Homological dimension [See also 13Dxx, 16A60, 16A62.]

18G25 Relative homological algebra, projective classes

secondary classifications:

Cheng, C. C. (with Wu, Yel Chiang) An eight-term exact sequence associated with a group extension. (83a:20063)

Fedin, S. N. Pure dimension of rings and modules. (Russian) (83m:16024)
Guichardet, A. *Cohomologie des groupes topologiques et des algèbres de Lie. (French)
[Cohomology of topological groups and Lie algebras] (83f:22004)
Wu, Yel Chiang See Cheng, C. C., (83a:20063)

18G30 Simplicial sets, simplicial objects (in a category) [See also 55U10.]

Glenn, Paul G. Realization of cohomology classes in arbitrary exact categories. 83j:18016 kharadze, L. M. The Cohen-Vogt formula for pseudosimplicial rings. (Russian) 83i:18022

Mielke, M. V. Exact intervals. 83f:18016

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Muir, A. See Warner, M. W., (83a:18010)

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18G35 Chain complexes [See also 18E30, 55U15.]

secondary classifications:

Alsbett, Janet On K_3 and K_4 of the integers mod n. (83e:18007)

18G40 Spectral sequences, hypercohomology [See also 55Txx.]

Huebschmann, Johannes Automorphisms of group extensions and differentials in the Lyndon-Hochschild-Serre spectral sequence. 83a:18021

Lubkin, Saul ★Cohomology of completions. 83f:18017

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Huebochmann, Johannes Group extensions, crossed pairs and an eight term exact sequence. (83a:20065)

Weibel, Charles A. See Dayton, Barry H., (83e:13014)

Wexter-Kreindler, Elena Anneaux filtrés complets et suites spectrales associées.

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Aznar Garcia, E. R. ★Cohomologia no abeliana en categorias de interés. (Spanish)
[Nonabelian cohomology in categories of interest] 83m:18016
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Lockhart, R. A note on nonsbelian homological algebra and endomorphism near-rings.

Singh, Sukhjit Pro-homology and isomorphisms of pro-groups. (83a:28066)

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Golasiński, Marek Homotopies of small categories. 83l::19009

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Brown, Ronald Higher-dimensional group theory. (83k:55014)
Loday, Jean-Louis Spaces with finitely many nontrivial homotopy groups. (83i:55009)

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Banaschewski, Berniard Alemma on flatuess. 836:18018
Cegarra, A. Martinez *Cohomologia varietal. (Spanish) [Cohomology of varieties]
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Niwa, Masahiko Notes on K-theory of linear categories. IV. 83g:18025
Świątek, Adela Category of cubical objects and category of simplicial objects. 83k:18016
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Brown, Kenneth S. Complete Euler characteristics and fixed-point theory. (834:20035)
Bunyatev, M. R. (with Kasimov, V. A.) The Eilenberg-Zil'ber theorem for Boolean algebras with closure. (Russian. English and Azerbaijani summaries) (834:60016)
Drhamelidze, G. Z. Cohomology of categorical objects and the Galois extension of commutative rings. (Russian. English and Georgian summaries) (83g:13001)
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Khelaya, L. G. The addition operation in the functor D(X, A). (Russian. English and Georgian summaries) (83f:55014)

Makharadze, L. M. Homotopy of the inverse limit of a sequence of pseudosimplicial rings and its application. (Russian. English and Georgian summaries) (83e:55007)

Nasr Bragim, Ahmed Helmi Muhammed Homotopy theory of distributive lattices with filters. (Russian. English and Azerbaijani summaries) (83h:06011)

Porter, Timothy Une théorie catégorique d'homotopie simple. [A categorical theory of simple homotopy] (83h:55040)

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20-XX GROUP THEORY AND GENERALIZATIONS

20-01 Elementary exposition, textbooks

Basmaji, B. G. Modular representations of metacyclic groups. 83m:20001

Belger, Martin (with Ehrenberg, Lothar) ★Theorie und Anwendung der
Symmetriegruppen. (German) [Theory and application of symmetry groups] 83j:20001

Bezivin, J.-P. (with Lévy-Bruhl-Laperrière, Anne) ★Les groupes finis et leurs
représentations complexes. (French) [Finite groups and their complex representations]

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Frey, Alexander H., Jz. (with Singmaster, David) **Handbook of cubik math. #Зж.20001 Gardiner, Cyril F. **A first course in group theory. #34:20001 Kargapolov, M. I. (with Merzlyakov, Yu. I.) **Основы теория групп. (Russian)

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(Sewon, Helmut ★Anwendungen der elementaren Gruppentheorie in Zahlentheorie und Kombinatorik. (German) [Applications of elementary group theory in number theory and combinatorics] 83m:20003
Singmaster, David See Frey, Alexander H., Jr., 83a:20001
Tsuzuku, T. ★Finite groups and finite geometries. 83b:20001
Zappa, Guido ★Topics on finite solvable groups. 83j:20002

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Hanner, Olof Solution techniques for the Hungarian cube. (Swedish. English summary)

(83c-20005)
(Koblitz, Neal I.) See Kostrikin, A. I., (83f-00003)
Kostrikin, A. I. ★Introduction to algebra. (83f-00003)
Mutaffan, Claude ★Le défi algébrique. Tome 1. (French) [The algebraic challenge. Vol. 1]
(83c-00006a)

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(83e:00006b)

★Âlgebra. Tomo 1. (Spanish) [Algebra. Vol. 1] (83e:00006c)

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Scheja, Günter (with Storch, Uwe) ★Lehrbuch der Algebra. Teil 3. (German) [Textbook of algebra. Part 3] (83e:00006)

(Sestier, Andrés) See Mutafian, Claude, (83e:00006c) and Mutafian, Claude, (83e:00006d)

Storch, Uwe See Scheja, Günter, (83d:00005)

20-02 Advanced exposition (research surveys, monographs, etc.)

Brown, Kenneth S. *Cohomology of groups. 83k-20002
(Cohn, P. M.) Ser James, Gordon; et al., 83k-20003
Feit, Walter Theory of finite groups in the twentieth century. 83d-20001
*The representation theory of finite groups. 83g-20001
Gaschütz, Wolfgang *Lectures on subgroups of Sylow type in finite soluble groups. 83k-20002

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| Green, James A. ★Polynomial representations of GL_a. 83;:20003

| James, Gordon (with Kerber, Adalbert) ★The representation theory of the symmetric group. #### R34:20003

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| Kuhn, U.) See Gaschitz, Wolfgang, #### R34:20002

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(Popov, V. L.) See Springer, TompyAlbert, 83e:20002
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(Bechtolsheim, Lulu) See Weyl, Hermann, (83m:00003)

Vovsi, Samuel M. *Triangular products of group representations and their applications.

20-03 Historical (must also be assigned at least one classification number from Section 01)

(Baer, Reinhold) See Fuchs, L., (83c:20063)
(Cauchy, Augustin Louis) See Dahan, Amy, (83c:01025)
Chernikov, S. M. (with Zaitsev, D. L.; Sysak, Ya. P.) O. Yu. Shmidt and group theory.
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m, Amy Les travaux de Cauchy sur les substitutions. Étude de son approche du concept de groupe. [Cauchy's works on permutations. Etude de son approach du concept de groupe. [Cauchy's works on permutations. A study of his approach to the concept of group] (83:e91025)

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Felt, Walter Theory of finite groups in the twentieth century. (83c:20001)
Fuchs, L. Reinhold Baer's work on abelian groups. (83c:20063)
Historical survey of abelian groups. (83a:01029)
Johnsen, Karsten On a forgotten note by Ernst Steinitz on the theory of abelian groups.

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Ledermann, W. The origin of group characters. (83g:01028)
Schein, Boris M. Victor Vladimirovich Vagner (1908–1981). (83a:01057)
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Sysak, Ys. P. See Chernikov, S. M.; et al., (83h:01071)
(Vagner, V. V.) See Schein, Boris M., (83a:01057)

Zaitsev, D. I. See Chernikov, S. M.; et al., (83h:01071)

Birth of Shmidt, O. Yu. See Chernikov, S. M.; et al., (83h:01071)

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Vagner, V. V. See Schein, Boris M., (83a:01057)

20-04 Explicit machine computation and programs (not the theory of computation or programming)

ison, Lloyd Generating coset representatives for permutation groups. 83a:20002
rahaus, J. (with Madlener, K.) The Nielsen reduction as key problem to polynomial
algorithms in free groups. 83m:20004
fleer, Gregory (with Cannon, John J.) Computing in permutation and matrix groups. I.
Normal closure, commutator subgroups, series. 83k:20004a
Computing in permutation and matrix groups. II. Backtrack algorithm.
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Cannon, John J. See Butler, Gregory, 83k:20004a
Kowalczyk, Ryszard (with Suffczyński, Maciej: Kunert, Herbert) *Vector coupling
coefficients of crystallographic groups. 83b:20002
Kunert, Herbert See Kowalczyk, Ryszard; et al., 83b:20002
Laue, Reinhard Computing double coset representatives for the generation of solvable groups. 83m:20005

fadlener, K. See Avenhaus, J., 83m:20004 leubüser, Joachim Computing with groups and their character tables. (See 83m:81001) inflexyiski, Maclej See Kowalczyk, Ryszard; et al., 83b:20002

Avenhaus, J. (with Madlener, K.) How to compute generators for the intersection of subgroups in free groups. (83h:68026)

Davies, B. L. Computational group theory in crystal physics: a review. (See 83m:81001)

Even, S. (with Goldreich, O.) The minimum-length generator sequence problem is NP-hard (834-68635)

 Kahranti. (8000003)
 Goldreich, O. See Even, S., (83d:68035)
 Kahirhain, L. A. (with Stognii, A. O.) Theory and practice of the application of computers in algebraic investigations. (Russian) (83e:68057)
 Madlener, K. See Avenhaus, J., (83b:68026)
 Rolley Le Coz, Monique Le groupe P1 et ses sous-groupes. IV. Traitement syst Madlener, K. See Avenhaus, J. (83k:68026)
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Stognii, A. O. See Kaluzhnin, L. A., (83i:68057)

20-06 Proceedings, conferences, etc.

(Borevich, Z. I.) See Modules and algebraic groups, 83h:20002
(Campbell, Colin M.) See Groups—St. Andrews, 83j:20005
(Celakoski, Naum) See Conference: Algebraic, 83e:20003
(Chernikov, S. M.) See Investigation of groups with given properties of a system of subgroups, 83j:20004 and Subgroup characterization of groups, 83j:20006
(Corsini, Piergiulio) See Conference: Binary Systems and their Applications, 83m:20006
(De Luca, Aldo) See Noncommutative structures in algebra and geometric combinatorics, 83a:26005

cendlinger, Martin) See Algorithmic problems of the theory of groups and semigrous RNs-20001

(Praeger, Cheryl E.) See Algebraic structu res and appli

(Praeger, Cheryl E.) See Algebraic structures and applications, 83a:20003
(Robertson, Edmund F.) See Groups—St. Andrews, 83j:20005
(Roggenkamp, Klaus W.) See Integral representations and applications, 83a:20004
(Schultz, Phillip) See Algebraic structures and applications, 83a:20003
(Skopin, A. L.) See Modules and algebraic groups, 83b:20002
(Sullivan, Robert P.) See Algebraic structures and applications, 83a:20003
(Tamura, Takayuki) See Abstract: Special Session on Semigroups and their Connection with Other Fields, 83i:20003

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Algebraic structures and applications *Algebraic structures and applications. 83æ20003
Algorithmic problems of the theory of groups and semigroups **Aлгоритынческие проблемы теорин групп и полугрупп. (Russian) [Algorithmic problems of the theory of groups and semigroups) 83h:20

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*Noncommutative structures in algebra and geometric combinatorics. 83a:20005

ebraic *Algebraic Conference. 83e

ary Systems and their Applications **Convegno su: Sistemi Binari e loro
Applicazioni. (Italian) [Conference on Binary Systems and their Applications]
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groups with given properties of a system of subgroups | 83;20004

Modern algebra **Cospeacemaa arreбpa. (Russian) [Modern algebra] 83;20001

Modules and algebraic groups **Monyли и алгебранческие группы. (Russian) [Modules and algebraic groups] 83h:20002

Naples See None tative structures in algebra and geometric comb

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Session:
Semigroups and their Connection with Other Fields ★Collected Abstracts of Special Session on Semigroups and their Connection with Other Fields. 83i:20003
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Subgroup characterization of groups ★Подгрупповая характеризация групп. (Russian) [Subgroup characterization of groups] 83i:20006
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secondary classifications:

(Aigner, Martin) See Geometries and groups, (83c:51002) (Göbel, Rüdiger) See Abelian group theory, (83a:20069) (Jungnickel, Dieteir) See Geometries and groups, (83c:51002) (Numakura, Katsumi) See Proceedings: Symposium on Semigroups, (Peák, L.) See Papers on automata theory, (83d:68004) (Perrin, Dominique) See Théorie des codes, (83m:94011) (Shelekhov, A. M.) See Webs and quassigroups, (83i:53007) (Skornyakov, L. A.) See Abelian groups and modules, (83h:20050) (Walker, Elbert) See Abelian group theory, (83a:20069) aps, (83a:20081) in

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Abelian group theory. ★Abelian group theory. (\$3s:20069)

Abelian groups and modules. ★Abeacus rpyums # Monyan. (Russian) [Abelian groups and modules] (\$3s:20050)

Berlin See Geometries and groups, (83c:51002)
Coding theory *Théorie des codes. (French) [Coding theory] (83m:94011)
Colloquium:

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20Axx Foundations

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Furuta, Yoshlomi (with Yamashita, Hiroshi) Representation modules and the augmentation ideal of a finite group. 83k:20007

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Stefan, P. On Peiffer transformations, link diagrams and a question of J. H. C. Whitehead. (83g:57001)

Tang, C. V. Conjugacy separability of certain 1-relator groups. (83k:20033)
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themstein, Woody A system of quadrics describing the orbit of the highest weight vector. (83h:14046) uritg, George Unipotent characters of the symplectic and odd orthogonal groups over a finite field. (83h:20011)

A class of irreducible representations of a Weyl group. II. (83h:20018) and I. G. Polynomial functors and wreath products. (83j:15923)

Some conjectures for root systems and finite Coxeter groups. (83:17007)

Merris, Russell Representations of $GL(n, \mathbb{R})$ and generalized matrix functions of class MPW. (83e:15009)

Morimoto, Massharu On the groups $J_G(\bullet)$ for $G=\operatorname{SL}(2,p)$. (83f:55009)

Musili, C. (with Seshadri, C. S.) Standard monomial theory. (83i:14046)

O'Halloran, Joyce Representation theory of an extension of a Chevalley group by a vector group. (83h:20046)

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rdson, R. W. Orbits, invariants, and representations associated to involutions of reductive groups. (83i:14042)

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Sakai, Kökichi Some remarks on unitary representations of the Euclidean motion group in II m-spaces. (83j:22007)

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Trusov, A. V. The principal series of representations of a group of p-adic quaternions in spaces over non-Archimedean fields. (Russian) (83k:20038)

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20G10 Cohomology theory

Friedlander, Eric M. (with Parshall, Brian) On the cohomology of Chevalley groups.

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secondary classifications:

Andersen, Henning Haahr Line bundles on flag manifolds. (83e:14010) Evens, Leonard (with Friedlander, Eric M.) On $K_*(\mathbb{Z}/p^2\mathbb{Z})$ and related homology groups. (83 \pm 18013) Friedlander, Feb. M. or, Eric M. See Evens, Leonard, (83j:18013)

Lubotzky, Alexander (with Magid, Andy R.) Cohomology of unipotent and prounipotent groups. (83d:14026) Magid, Andy R. See Lubotzky, Alexander, (83d:14026) Mitchell, Barry Monoidal structures are considered.

Michell, Barry Monoidal structures on graded categories. (83f:18009)
Morita, Jun On some twisted Chevalley groups over Laurent polynomia (83i:20057)

Sarkisyan, R. A. A problem of equality for Galois cohomology. (Russian) (83i:12012)

20G15 Linear algebraic groups over arbitrary fields

renko, A. A. The numbers and groups of classes of semisis oups in canonical realizations. (Russian. English summary) aple indefinite algebraic

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Richardson, R. W. An application of the Serre conjecture to semisimple algebraic groups. 83i:20047 Serezhkin, V. N. On linear groups that are rich in transvections. (Russian. English

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Gérardin, Paul Immeubles des groupes linéaires généraux. [Buildings of the general linear groups] (83c:22021) nes, Donald C

nald G. Homomorphisms of unitary groups. (83a:10036)

Kac, Victor (with Watanabe, Keiichi) Finite linear groups whose ring of invariants is a complete intersection. (83h:14042)

Li, Zun Xian The automorphisms of the orthogonal groups $\Omega_3(V)$. (83k:10045) Nolte, Wolfgang See Ellers, Erich W., (83f:20033) Panyushev, D. I. Orbit spaces of finite and connected linear groups. (Russian)

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secondary classifications:

Djoković, Dragomir Ž. Subgroups of compact Lie groups containing a maximal torus are closed. (83m:22014)

Fluch, Wolfgang Eine Untergruppe der Lorentzgruppe. [A subgroup of the Lorentz group] (83k:22034)

Knapp, A. W. Commutativity of intertwining operators for semisimple groups. (831:22022)

Magid, Andy R. Analytic subgroups of affine algebraic groups. II. (83e:22010)
Majeed, Abdul Some nonfree subgroups of SL(2, C). (83h:10057)
Rubenthaler, Hubert Classification infinitesimale des formes réelles de certains espaces préhomogènes. (English summary) [Infinitesimal classification of real forms of some prehomogeneous spaces] (83h:17009)

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Sheistad, D. Embeddings of L-groups. (83e-22022) Yasukura, Osami (with Yokota, Ichiro) Subgroup (SU(2) \times Spin(12))/ \mathbb{Z}_2 of compact simple Lie group E_7 and noncompact simple Lie group $E_{7,o}$ of type $E_{7(-5)}$. (83e-22016) Yekota, Ichiro Subgroup SU(8)/ \mathbb{Z}_2 of compact simple Lie group E_7 and noncompact simple Lie group $E_{7(7)}$ of type E_7 . (83e-22017) See also Yasukura, Osami, (83e-22016)

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Garland, Howard The arithmetic theory of loop groups. 83a:20057
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20G30 Linear algebraic groups over global fields and their integers

Raghunathan, M. S. Isogenies and congruence subgroups. 83e:20046

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Matveev, G. V. The Hasse principle for lattices in a full matrix algebra. (Russian) (83d:12004)

Sansue, Jean-Jacques Groupe de Brauer et arithmétique des groupes algébriques linéaires sur un corps de nombres. [The Brauer group and arithmetic of linear algebraic groups on a number field] (83d:12010)

Sarkisyan, R. A. Algorithmic questions for linear algebraic groups. I. (Russian) (83a:20049a)

Algorithmic questions for linear algebraic groups. II. (Russian) (83a:20049b)

Satake, I. Special values of zeta functions associated with self-dual homogeneous cones. (83h:10051)

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Golubchik, I. Z. (with Mikhalev, A. V.) Generalized group identities in classical groups.

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Roloff, Kh. Lower central series and series of commutants of net subgroups of the general linear group. (Russian) 83k:20049

Vaserstein, L. N. On the normal subgroups of GL, over a ring. 83c:20058

Vavilov, N. A. Subgroups of the unitary group over a semilocal ring. (Russian) 83k:20050

(with Plotkin, E. B.) Net subgroups of Chevalley groups. II. Gaussian

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Bachmuth, S. (with Mochizuki, H. Y.) GL_n and the automorphism groups of free metabelian groups and polynomial rings. (83m:20054) (Demazure, Michel) Ser Weil, André, (83m:10032) (Rattor, William M. Generation of linear groups. (83g:51025) (Mochizuki, H. Y. See Bachmuth, S., (83m:20054) (Ono, Takashi) See Weil, André, (83m:10032)

Sansuc, Jean-Jacques Groupe de Brauer et arithmétique des groupes algébriques linéaires sur un corps de nombres. [The Brauer group and arithmetic of linear algebraic groups on a number field] (834:12010)

Schwarz, Binyamin (with Zaks, Abraham) Matrix Möbius transformations. (834:15023)

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Towber, Jacob Young symmetry, the flag manifold, and representations of GL(n). (83d:15022)

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Archer, James Principal indecomposable modules for some three-dimensional special linear groups. 83b:20048

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Concernian, Brace N. Subgroups of exceptional groups of Lie type generated by long root elements. I. Odd characteristic. 83i:20038a

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e, R. H. Alternating groups as maximal subgroups of the special orthogonal group over the field of two elements. \$30,20059

Harris, Morton E. A note on the classical linear groups over finite fields. \$3420039

Helm, P. R. 'A presentation for SL(2, Z_{p'}). \$3420040

Kawanaka, Noriaki Liftings of irreducible characters of finite classical groups. I.

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 Seitz, Gary M. On the subgroup structure of classical groups. 83e:20052
 Surowaki, David B. Reflection compounds and certain r-blocks of finite Chevalley groups. 83e:20060
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 The Biograph of the second of the second of the second of the second of the second of the second of the transfer.

Zha, Jian Guo A class of solvable complet (Chinese. English summary) 83:20041 lete groups obtained from the groups of Lie type.

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Afler, Allan Some integral representations of $PSL_\chi(F_p)$ and their applications. (83g:14019)

On the automorphism groups of certain hypersurfaces. (83g:14026) charya, Prabir On groups containing the projective special linear group.

Brenner, J. L. (with Wiegold, James) Two-generator groups. II. (83c:20008)
Brosé, Michel Dualité de Curtis et caractères de Brauer. (English summary) [Curtis duality and Brauer characters] (83m:20059)

obsanty and Brauer characters] (83m:28059)

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Normal closure, commutator subgroups, series. (83k:28004a)

Computing in permutation and matrix groups. II. Backtrack algorithm.

(83k:28064b) utation and matrix groups. I.

Campbell, Colin M. (with Robertson, Edmund F.) Two-generator two-relation presentations for special linear groups. (83h:26031)

Cannon, John J. Ser Butler, Gregory, (83k:20004a) Helversen-Pasotto, Anna Darstellungen von $\mathrm{GL}(3,F_q)$ und Gaußsche Summen.

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wiveaus, Rhama *Representations of finite Chevalley groups. (83a:20054)
havevet/kli, O. L. The number of classes of projectively equivalent binary forms over a
finite field. (Russian. English summary) (83k:10042)
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20G45 Applications to physics; explicit representations

Balantekin, A. Baha Anomalies and eigenvalues of Casimir operators for Lie groups and supergroups. 83k:20053
Johnson, Robert Cameron Angular momentum on a lattice. 83j:20049

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Antillón, A. (with Seligman, Thomas H.) Explicit expressions for double Gel'fand states. (83h:81029)

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(Carruthers, Peter A.) See Biodenham, Lawrence C.; et al., (83d:81002) Chatterjee, Ramananda See Lulek, B.; et al., (83h:81031) Gaskell, R. (with Rosensteel, G.; Sharp, R. T.) Sp(6) states in an SU(3)×U(1) basis. (83f:81040a) (with Sharp, R. T.) Generating functions for G2 characters and subgroup

(with Sharp, R. T.) Generating functions for G₂ characters and subgroup branching rules. (83:81646b) Louck, James D. See Biedenharn, Lawrence C., (83:81002) Lulek, B. (with Lulek, T.; Chatterjee, Ramananda) Racah algebra for the double trigonal group. (French summary) (83:k81631) Lulek, T. See Lulek, B.; et al., (83:k81631) Lulek, T. See Lulek, B.; et al., (83:k81631) (Mackey, George W.) See Biedenharn, Lawrence C.; et al., (83:810402) Rosensteel, G. See Gaskell, R.; et al., (83:k81640a) Seligman, Thomas H. See Antiflon, A., (83:k81629) Sharp, R. T. See Gaskell, R.; et al., (83:81640a) and (83:81040b)

20G99 None of the above, but in this section secondary classifications:

Doralswamy, Ida Projectivity of modules over rings with suitable group action.
(83g:14024)

ard J. (with Gordon, Basil; Tannenbaum, Peter) Partitions of groups der, Rich and complete mappings. (83a:20079)
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Ishibashi, Hiroyuki Unitary groups with excellent S and entire E(u, L). (83i:10030)

(with Ronan, Mark A.) On buildings and locally finite Tits geometries. (834-51006)

ntcha, Mohan S. On linear algebraic semigroups. III. (83k:20073a) Corrigendum: "On linear algebraic semigroups. III". (83k:20073b) Oman, Mark A. See Ott, Udo. (834:51006)

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alin-Aubin, Yvan Fonctio O(3,1). (English summary) [Generating functions and integrality
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annenbaum, Peter See Friedlander, Richard J.; et al., (83a:20079)
lts, Jacques A local approach to buildings. (83k:51014)

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20H05 Unimodular groups, congruence subgroups [See also 10D07, 22E40, 51F20.]

Cohen, Jeffrey Mitch ell On non-Hurwitz groups and noncongruence subgroups of the

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Wan, Zhe Xian (with Yang, Jin Gen) Automorphisms of the quaternion unimodular group of two dimensions. (Chinese. English summary) 83i:20042

Yang, Jin Gen See Wan, Zhe Xian, 83i:20042

secondary classifications:

namer, J. L. (with Lyndon, R. C.) Nonparabolic subgroups of the modular group. (83a:10048)

en, Jeffrey Mitchell On covering Klein's curve and generating projective groups. (R3k:10049

es, Gareth A. Triangular maps and noncongruence subgroups of the modular group.

Jergensen, Truels Traces in 2-generator subgroups of SL(2, C). (83e:10031)

Lai, K. F. On the cohomology of congruence subgroups of symplectic groups

Larcher, H. The cusp amplitudes of the congruence subgroups of the classical modular group. (83s:10040)
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 Murase, Atsushi On the uniform distribution property of certain linear algebraic groups.

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Stothers, W. W. Subgroups of infinite index in the modular group. II. (83m:10033a)
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Ts'ao, Liang Chi On a Poincaré series for certain modular subgroup. (83i:10034)
Tuler, Randy On the linking number of a 2-bridge link. (83a:22014)

20H10 Fuchsian groups and their generalizations [See also 10D07, 22E40, 30F35, 32Nxx.1

Edmonds, Allan L. (with Ewing, John H.; Kulkarni, Ravi S.) Torsion free subgroups of Fuchsian groups and tessellations of surfaces. 83m:20065
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Kulkarni, Ravi S. See Edmonds, Allan L.; et al., 83m:20065
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[Automorphisms of planar discontinuous groups] 83e:20062

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panasov, B. N. See Krushkal', S. L.; et al., (83m:30032)
ertaut, Erwin-Felix Méthode macroscopique d'analyse de structures displacives.
Application à la transition du type NiAs hexagonal au type MnP orthorhombique.
(English summary) [A macroscopic method of analysis of displacement structures.
Application to the transition of hexagonal NiAs type to orthorhombic MnP type]
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upont, Johan L. Hyperbolic scissor congruence. (See 83k:57001)
oldman, William M. Characteristic classes and representations of discrete subgroups of Lie groups. (83h:22012)

Guo, Qi Ti A further study on closed-net-diagrams of binary six-phase (n+4)

ю, Ql Tl A further study on closed-net-diagrams of binary six-phase (n+4) multisystems. (83æ51028)

весчайл, N. A. See Krushkal', S. L.; et al., (83æ30032)

вес, Gareth A. Graph imbeddings, groups, and Riemann surfaces. (83æ65061)

шякай, S. L. (with Apanasov, B. N.; Gusevskil, N. A.) ★Клейновы группы и упиформизация в примерах и задачах. (Russian) [Kleinian groups and uniformization in examples and problems] (83æ30032)

hner, Joseph On polygon groups. (83æ10056)

summerenke, Christian On Fuchsian groups of divergence type. (83i:30060)

west, Mary Divergence type of some subgroups of finitely generated Fuchsian groups. (83i:50061)

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20H15 Other geometric groups, including crystallographic groups [See also 51-XX, especially 51F15, and 82A60.]

Angelova, M. N. See Kotzev, J. N.; et al., (See 83m:81001)

Aroyo, M. I. See Kotzev, J. N.; et al., (See 83m:81001)

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Billiet, Yves Des dangers d'utiliser sans précaution des tables de sous-groupes maximum; retour au théorème d'Hermann. (English summary) [The dangers of using tables of maximal subgroups without care; Hermann's theorem revisited] 83a:20060 (with Burzlaff, H.; Zimmermann, Helmuth Walter) Comment on the paper: "On the choice of origins in the description of space groups" by Burzlaff and Helmuth Walter Zimmermann. 83j:20051b

er, Anders (with Wachs, Michelle) Bruhat order of Coxeter groups and shellability. 83±20043

rger, Martin J. The several projections of the symmetry elements of a space group. R3k-20044

jalance, Emilio Normal subgroups of N.E.C. groups. 83e:20047
relaff, H. (with Zimmermann, Helmuth Walter) On the choice of origins in the description of space groups. 83j:20051a

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(with Tarkhova, T. N.; Talis, A. L.; Suvorova, G. F.; Belov, N. V.)

(with Tarkhova, T. N.; Talis, A. L.; Suvorova, G. F.; Belov, N. V.)

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Davies, B. L. Computational group theory in crystal physics: a review. (See 83m:81001) Deodhar, Vinay V. On the root system of a Coxeter group. 83j:20052a Dummyanu, V. I. See Zabolotnyi, P. A., 83i:20044 Ellers, Erich W. (with Nolte, Wolfgang) Radical relations in orthogonal groups.

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20N10 Ternary systems (heaps, semiheaps, heapoids, etc.)

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Bektenov, A. S. See Belousov, V. D., 83a:20097 and 83k:20082
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On a class of subdirectly irreducible groupoids. (Russian and Czech summaries)

A note on subdirectly irreducible groupoids. (Russian and Czech summaries)

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Vouglouklis, Th. Cyclicity in a special class of hypergroups. (83a:08007a)

The set of hypergroups with operators which are constructed from a set with two elements. (83a:08007b)

20P05 Probability methods in group theory

Pavlov, A. I. On the limit distribution of the number of solutions of the equation $x^k=a$ in the symmetric group S_n . (Russian) 83g:20083

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Ancheta, Teofilo C. An upper bound on the ratio of the probabilities of subgroups and

Godsil, C. D. Matching behaviour is asymptotically normal. (83c:05099)

22-XX TOPOLOGICAL GROUPS, LIE GROUPS (For transformation groups, see 54H15, 57Sxx, 58-XX. For abstract harmonic analysis, see 43-XX.}

22-01 Elementary exposition, textbooks

Belger, Martin (with Ehrenberg, Lothar) *Theorie und Anwendung der Symmetriegruppen. (German) [Theory and application of symmetry groups] (83):20001)

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Dierolf, Suname See Roekke, Walter. (83):20001)
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(with Dawber, P. G.) *Symmetry in physics. Vol. 2. (83):81002b)
Hallord, W. D. Continuous transformation groups. (83):22012b)
Lie transformation groups. (83):22012b)
Hua, Luo Geng *Starting with the unit circle. (83):90001)
Kruchkovich, G. I. *Лекция по труппак движений. Вым. 1. (Runsian) [Lectures on groups of motions. No. 1] (83):53001)
Roekke, Walter (with Dierolf, Susanne) *Uniform structures on topological groups and their quotients. (83):22001)

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22-02 Advanced exposition (research surveys, monographs, etc.)

Dieroll, Susanne See Roelcke, Walter, #3j:22001

Mader, Adoll Basic concepts of functorial topologies. #3e:22001

Roelcke, Walter (with Dieroll, Susanne) *Uniform structures on topological groups and their quotients. 83/:22001

22-03 Historical (must also be assigned at least one classification number from Section 01)

secondary classifications:

Schmid, Wilfried Poincaré and Lie groups. (83e:01036)

22-04 Explicit machine computation and programs (not the theory of computation or programming)

secondary classifications:

Bernotzs, A. P. Ser Sabaliaunkas, L., (83:E1098)
Sabaliaunkas, L. (with Bernotas, A. P.) Classification of SU(3)-states for heavy deformed nuclei. (Russian. English and Lithuanian summaries) (83:E1098)

22-06 Proceedings, conferences, etc.

(Herz, Carl) See Seminar: Harmonic Analysis, 83h:22001 (Hirai, Takeshi) See Lectures on harmonic analysis on Lie groups and related topics, 83k:22001

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22Axx Topological algebraic systems {For topological rings and fields, see 12Jxx, 13Jxx, 16A80; for dual spaces of operator algebras and topological groups, see 47D35.}

22A05 Structure of general topological groups

Arkhangel'skii, A. V. Any topological group is a quotient group of a zero-dimensional topological group. (Russian) 83e:22002
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easyst, M. I. Connected groups with dense sets of compact elements. (Russian)

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Day, Mahlon Marsh Left thick to left lumpy—a guided tour. (83k:43002) Gubreev, G. M. (with Prigorskii, V. A.) Reducibility of bounded representations of

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Junghenn, H. D. Amenability induced by amenable homomorphic images. (83e:43001)

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a Lie group. (83m:60018)

Sleijpen, Gerard L. G. The order structure of the space of measures with continuous translation. (French summary) (83k:43005)

Wong, James C. S. On left thickness of subsets in semigroups. (83d:43003)

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22A26 Topological semilattices, lattices and applications [See also 06B30, 06F30.1

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ng, S. S. (with Nel, L. D.) Reflexive topological semilattices. 83b:22003 Nel, L. D. See Hong, S. S., 83b:22003
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22A30 Other topological algebraic systems and their representations

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22A99 None of the above, but in this section

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Tits, Jacques Groupes à croissance polynomiale (d'après M. Gromov et al.). [Groups with polynomial growth (after M. Gromov et al.)] (83t:53065)

22Bxx Locally compact abelian (LCA) groups

22B05 General properties and structure of LCA groups

Armacost, David L. *The structure of locally compact abelian groups. 839:22010
Comfort, W. W. (with Soundararajan, T.) Pseudocompact group topologies and totally

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Katz, Elyahu (with Morris, Sidney A.) On endomorphisms of abelian topological groups.

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D'Antoni, Claudio Functional calculus and representations of locally compact abelian groups. (83m:47016)

22B10 Structure of group algebras of LCA groups

22B99 None of the above, but in this section

Prodanov, Iv. Elementary proof of the Peter-Weyl theorem. (Russian) 83k22007

22C05 Compact groups

Alperin, Roger Compact groups acting on trees. 83h:22004
Chatterjee, Ramananda (with Lulek, T.) Permutational properties of the generalized Clebsch-Gordan coefficients. 83h:22011

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Bröcker, Theodor *Analysis in mehreren Variablen. (German) [Analysis in several variables] (83g:00002)

Brychkov, Yu. A. See Prude

(Földes, Istvin) See Pólya, George; et al., (83d:00

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(Kowalski, Oldřich ★Elemente der Analysis auf Mannigfaltigkeiten. (German) [Elements of analysis on manifolds] (83d:50002)
(Krienes, Klaus) See Smirnov, V. I., (83k:00001)

Malina, Štefan Notes on a method of introducing med numbers (Slovak English and

(News, Saiss) Ser Summy, V. L. (282-2000)
Maina, Stefan Notes on a method of introducing real numbers. (Slovak. English and Russian summaries) (83e-94010)
Marichev, O. L. Ser Pradatkov, A. P.; et al., (83b-90009)
Moise, Edwin E. #Introductory problem courses in analysis and topology. (83e-96008)
(Nagy, Zsigmond) Ser Púlya, George; et al., (83d-90009a)
Niven, Ivan *Maxima and minima without calculus. (83i:52011)

Pólya, George (with Szegő, Gábor) *Feladatok és tételek az analízis köréből. I.

ya, teorge (with Szego, Gabor) ★ Feindatok es tetelek az analazis koreből. I.

(Hungarian) [Problems and theorems concerning analysis. I] (834:00009a)

(with Szego, Gábor) ★ Feladatok és tételek az analazis köréből. II. (Hungarian)

[Problems and theorems concerning analysis. II] (834:00009b)

shilkov, A. P. (with Brychkov, Yu. A.; Marichev, O. I.) ★ Интегралы в рады.

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(Razmadze, A. M.) See Bendukidze, A. D.; et al., (83dc01041)
Rideau, François ★Exercices de calcul différentiel. (French) [Exercises in differential calculus] (83gc58001)
Schell, H.-J. ★Unendliche Reihen. (German) [Infinite series] (83kc40001)
Smirnov, V. I. ★Lehrgang der höheren Mathematik. Teil I. (German) [Course in higher mathematics. Part II] (83kc00001)

ubecker, Karl *Einführung in die höhere Mathematik. Band I. (German)
[Introduction to higher mathematics. Vol. I] (83m:00002a)

*Einführung in die höhere Mathematik. Band II. (German) [Introduction to

higher mathematics. Vol. II] (83m:0002b)

*Einführung in die höhere Mathematik. Band III. (German) [Introduction to higher mathematics. Vol. III] (83m:00002c)

Szegő, Gábor See Pólya, George, (83d:00009a) and (83d:00009b)

26-02 Advanced exposition (research surveys, monographs, etc.)

Humke, Paul D. Some problems in need of solution. (See 83a:26004)

secondary classifications:

Baidosov, V. A. (with Melent-sov, A. A.) ★Нешреравиные и дифференцируевые отображения. (Russian) [Continuous and differentiable mappings] (83e:58007) Gilmore, Robert ★Catastrophe theory for scientists and engineers. (83b:58019) Melent-sov, A. A. See Baidosov, V. A., (83e:58007)

26-03 Historical (must also be assigned at least one classification number from Section 01)

Medvedev, F. A. On Riemann's proof of a condition for the integrability of functions. (Russian. English summary) 83m:26002

secondary classifications:

(Darboux, Gaston) See Gispert-Chambaz, Hélène, (83:01038)
(Du Bois-Reymond, Paul) See Fisher, Gordon M., (83e:01035)
Dugac, Pierre Des fonctions comme expressions analytiques aux fonctions représentables analytiquement. (English summary) [From functions as analytic expressions to analytically representable functions] (836:01038)

Fisher, Gordon M. The infinite and infinitesimal quantities of du Bois-Reymond and

their reception. (83e:01035)

nbaz, Hélène *Camille Jordan et les fonder [Camille Jordan and the foundations of analysis] (83i:01038)
(Hould, Jacques) See Gispert-Chambaz, Hélène, (83i:01038)
(Jordan, Camille) See Gispert-Chambaz, Hélène, (83i:01038)
(Mitrinović, Dragoslav S.) See Dragoslav S. Mitrinović: life and work, (83d:01074)
(O'Brien, Matthew) See Smith, G. C., (83k:01027)

Pieters, Jean Origines de la découverte par Leibniz du calcul infinitésimal. [Origins of Leibniz' discovery of the infinitesimal calculus] (83m:01061)

Smith, G. C. Matthew O'Brien's anticipation of vectorial mathematics. (German summary) (83k:01027)

Spalt, Detlef D. *Vom Mythos der mathematischen Vernunft. (German) [On the myth of mathematical reason] (83h:01049)
van der Waerden, Bartel Leendert *Erwachende Wissenschaft. Band 2. (German)

[Science awakening. Vol. 2] (83a:01004)

Zhu, Qiu Chang On the dialectic properties of the concept of derivatives and the theory of limits. (Chinese) (83f:00019)

Mitrinović, Dragoslav S. ★Драгослав С. Митриновик: живот и дело. [Dragoslav S. Mitrinović: life and work] (83d:01074)

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Mitrinović, Dragoslav S. See Dragoslav S. Mitrinović: life and work, (83d:01074)
O'Brien, Matthew See Smith, G. C., (83k:01027)

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Darboux, Gaston See Gispert-Chambaz, Hélène, (83:01038)
Dragoslav S. Mitrinoviĉ: life and work ★Драгослав С. Мятриновиќ: живот и дело.
[Dragoslav S. Mitrinoviĉ: life and work] (83:01074)

26-04 Explicit machine computation and programs (not the theory of computation or programming)

26-06 Proceedings, conferences, etc.

Real Analysis Summer Symposium *Proceedings of the Real Analysis Sum Symposium. E0a:26004

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Real Analysis See Proceedings: Real Analysis Summer Symposium, 82s:2604
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26A03 Foundations: limits and generalizations, elementary topology of the line

magne, J.-C. On a recurrent misuse of a classical functional equation result. 834:26004 Falm

Kharazishvill, A. B. Generalized limits on the real line. (Russian. English and Georgian cs) 83a:26005

Klosińska, Wiktoria On some topologies in the set of real numbers. (Russian and Polish

Mandelkern, Mark Components of an open set. 83j:26002

secondary classification

Abdullaev, T. See Antonovskii, M. Ya.; et al., (834:54049)
Antonovskii, M. Ya. (with Azimov, D.; Abdullaev, T.) Generalized metrics on the real axis. (Russian) (834:54049)

Aximov, N. See Antonovskii, M. Ya.; et al., (B34:54049)
de Caux, Peter Yet another property of the Sorgenfrey plane. (B38:54032)
Gelfond, Michael A class of theorems with valid constructive counterparts. (B3e:03062)
Mandelkern, Mark Located sets on the line. (B3e:03066)
Neubrunn, Tibor On Blumberg sets for multifunctions. (Russian summary) (B38:54006)

26A06 One-variable calculus

dez Palazuelos, José Lúcio Simplifications in the calculus of extreme values. Fen (Spanish) 83m:26003

Flanders, Harley On the Fresnel integrals. 83g:26001

Jacobson, Bernard On the mean value theorem for integrals. 83g:26002

Johnsonbaugh, Richard The trapezoid rule, Stirling's formula, and Euler's constant.

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Porter, G. J. New angles on an old game. 83g:26003
Treiber, Dietmar Zur Behandlung, von differenzierbaren Wegen im Analysisunter
[On the treatment of differentiable paths in the teaching of analysis] 83e:26005
Yosida, Kōsaku A note on the fundamental theorem of calculus. 83f:26002

secondary classifications:

Maxian, Milan (with Šalát, Tibor) Remarks on the exponential function. (Russian and

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Salat, Tibor See Maxiai, Milan, (Sil-26003)
Stancia, T. N. La réciproque du théorème de moyenne de Cauchy. (German and Romanian summaries) [The converse of the Cauchy mean-value theorem] (83):26007)

26A09 Elementary functions

Maxian, Milan (with Salat, Tibor) Remarks on the exponential function. (Russian and Slovak summaries) 83j:26003

Rüthing, Dieter Eine konstruktive und analoge Einführung der Exponential- und Logarithmusfunktion. [A constructive and analogous introduction to exponential and logarithm functions] 83g:26004
Šalát, Tibor See Maxián, Milan, 83j:26003

26A12 Rate of growth of functions, orders of infinity, slowly increasing functions [See also 26A48.]

Bingham, N. H. (with Goldie, Charles M.) Extensions of regular variation. I. Uniformity and quantifiers. 83m:260

(with Goldie, Charles M.) Extensions of regular variation. II. Representations and

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Zajiček, L. On preponderant maxima. 83m:26005

secondary classifications

Macintyre, Angus The laws of exponentiation. (83f:03037)
Szlenk, W. Some dynamical properties of certain differentiable mappings of an interval. (83-58048)

26A15 Continuity and related questions (modulus of continuity, semicontinuity, discontinuities, etc.) (For properties determined by Fourier coefficients, see 42A16; for those determined by approximation properties, see 41A25.}

Beer, Gerald Upper semicontinuous functions and the Stone approximation theorem. 83h:26005

(Bruckner, A. M.) See Laczkovich, M.; et al., 83b:26005 Ceder, Jack Some examples on continuous restrictions. 83e:26006

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83b:26005

Marik, Jan (with Weil, Clifford E.) Products of derivatives and approximate continuity. (See 83a:26004)

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ska, Gy. See Laczkovich, M., 83b:260

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See also Kostyrko, Pavel; et al., 83a:26008

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secondary classifications:

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26A16 Lipschitz (Hölder) classes

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26A18 Iteration [See also 39B10, 47H10, 54H25.]

Boyarsky, Abraham See Proppe, Harold, 83c:26001 Creutz, Michael (with Sternheimer, R. M.) On the convergence of iterated exponentiation. II. 83b:26006

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so, J. Common fixed points for a class of commuting mappings on an interval.

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McGuire, James B. (with Thompson, Colin J.) Iteration of piecewise linear maps on an interval. (83g:50036)

lenk, W. Some dynamical properties of certain differentiable mappings of an interval.

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Thomae, Stefan (with Grossmann, Siegfried) Correlations and spectra of periodic chaos generated by the logistic parabola. (33g:39043)

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Zhou, Zuo Ling A necessary and sufficient condition for the finiteness of nonwandering sets of mappings of the interval. (Chinese. English summary) (83g:59057)

26A21 Classification of real functions; Baire classification of sets and functions [See also 04A15, 28A05, 54C50.]

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Cox, Gregory V. (with Humke, Paul D.) Classes of Baire functions. 83k:26002
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26A24 Differentiation (functions of one variable): general theory, generalized derivatives, mean-value theorems [See also 28A15.]

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(83]:58015) Fujito, Isami On the continuity and the differentiability of a function. (Japanese. English ary) (83f:26003)

Jacobson, Bernard On the mean value theorem for integrals. (83g:26002)

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26A27 Nondifferentiability (nondifferentiable functions, points of nondifferentiability), discontinuous derivatives

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26A30 Singular functions, Cantor functions, functions with other special properties

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Delaye, Marc See le Mehaute, Alain; et al., (83k:82060)
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26A36 Antidifferentiation

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26A39 Denjoy and Perron integrals, other special integrals

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26D15 Inequalities for sums, series and integrals

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Chan, Ling Yau (with Lau, Kee Wai; Ng, Shu Ming) On classes of asymptotic functions and integrability of power series and trigonometric series. (83m:42006)

Chong, Kong Ming On a majorization theorem in multivariate distributions. (Italian summary) (83a:60035)

Gindler, Herbert A. (with Goldstein, Jerome A.) Dissipative operators and series

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Lau, Kee Wai See Chan, Ling Yau; et al., (83m:42008)

Li, Kuo Wei Majorization on finite partially ordered sets. (83h:06007)

Mahajan, Arvind A note on positivity of integrals and enveloping series. (83b:33017) See also Ross, Dieter K., (83b:33016)

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Pankov, P. S. (with Bayachorova, B. D.) Application of automatic theorem proving by computer to a generalized Bernstein inequality. (Russian) (83m:41012)

Ross, Dieter K. (with Mahajan, Arvind) On enveloping series for some of the special functions, and on integral inequalities involving them. (83h:33016)

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Pečarić, Josep E. (with Janić, Radovan R.; Klamkin, Murray S.) Inequalities for

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Rastall, Peter The meaning of the Bell inequalities. (83):81013)

Sharma, Ambikeshwar (with Tzimbalario, J.) Some inequalities for a certain class of C** functions. (E3i:26017)
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independent variables. (83s:39014)

Tzimbalario, J. See Sharma, Ambikeshwar, (83i:26017)
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26D99 None of the above, but in this section

secondary classifications:

Keener, Lee L. A new proof of the anake theorem. (83:41635) Lacković, Ivan B. (with Vasić, P. M.) Notes on convex functions. V. Positive linear operators and functions convex of order n. (83a:26019b)

Spiegelman, Clifford A univariate inequality for medians. (83p:60022)

Vasić, P. M. See Lacković, Ivan B., (83a:26019b)

Yang, Lu (with Zhang, Jing Zhong) A class of geometric inequalities on finite points. (Chinese) (83f:51027)

Zhang, Jing Zhong See Yang, Lu, (83f:51027)

26Exx Miscellaneous topics [See also 58Cxx.]

26E05 Real-analytic functions

Laloy, M. (with Sayinzoga, A.) Sur une propriété des fonctions analytiques à deux variables réelles. [On a property of analytic functions of two real variables] 834:26011
Nikiforova, V. V. Criterion for choosing the optimal measuring basis. (Russian. English ary) 83e:26027

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26E10 C[∞]-functions, quasi-analytic functions

Couture, Raymond Un théorème de Denjoy-Carleman sur une courbe du plan complexe.

[A Denjoy-Carleman theorem on a curve in the complex plane] \$3\text{k:26025}\$

Crick, Stephen E., Jr. Inclusion relations for Bernstein quasi-analytic classes. Reboul, T. Introduction to real quasianalytic classes and continuation problems. en E., Jr. Inclusion relations for Bernstein quasi-analytic classes. 83k:26018 83g:26033

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secondary classifications:

Chernyavskii, A. G. Quasianaliticity with respect to a second-order elliptic operator with analytic coefficients. (Russian) (83h:58032)

Deakin, Michael A. B. Corrigenda: "New proofs of some theorems on infinitely differentiable functions" [Bull. Austral. Math. Soc. 17 (1977), no. 2, 161-175; MR 57

#7650]. (83a:58013)

26E15 Calculus of functions on infinite-dimensional spaces

Clarke, Frank H. Generalized gradients of Lipschitz functionals. 83a:26031

secondary classifications:

Gabler, Werner Differential calculus in pseudotopological linear groups. (83i:58014)
Giles, John R. **Convex analysis with application in the differentiation of convex functions. (83g:46001)
Hiriart-Urruty, Jean-Baptiste *-subdifferential calculus. (83j:58016)
Ngô Ash Tik Stability properties of differentiable functions on Banach spaces.

26E20 Calculus of functions taking values in infinite-dimensional spaces

Bardaro, Carlo On differentiation with respect to a continuous function for mappings with values in Banach spaces. (Italian) 83e:26018

Janicka, Liliana Some remarks on approximate derivative of vector valued functions.

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secondary classifications:

Ghosh, Sankar On generalisation of fundamental theorem of integral calculus for Banach-space-valued functions for application in multivariate-analysis. (83;:26005)
Ray, William O. See Rosenholtz, Ira, (83c:58019)
Rosenholtz, Ira (with Ray, William O.) Mapping theorems for differentiable operators. (Russian summary) (83c:58019)

26E25 Set-valued functions [See also 54C60.]

Le Van Hot On the differentiability of multivalued mappings. I. 83a:26032a
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secondary classifications:

Ahmed Gamal, Mohamed Théorème de la valeur moyenne pour des multiapplications.
[Mean value theorem for multivalued maps] (83e:54015)

Ioffe, Alexandre D. Nonsmooth analysis and the theory of fans. (83h:58012)

Pecherskaya, N. A. Differentiability of multivalued mappings. (Russian. English

summary) (83e-90129)
Zaslavskii, A. Ya. Tumpike sets of continuous trans (Russian) (83k:54017) formations of metric compacta.

26E30 Non-Archimedean analysis [See also 12J25.]

secondary classifications:

Schramm, Ruben On the global behaviour of differentiable functions in non-Archimedean fields. (83:12016)

26E35 Nonstandard analysis [See also 03H05.]

skins, Roy Frank Superreals and superfunctions. 83d:26012 themberg, Frank $[0,\infty]$ -valued, translation invariant measures on N and the Dedekind completion of *R. 83c:26019

secondary classifications:

Cutland, Nigel J. On the existence of solutions to stochastic differential equations on Loeb spaces. (83h:60059)

Hatcher, William S. Calculus is algebra. (83g:03073)

Henson, C. Ward (with Wattenberg, Frank) Egoroff's theorem and the distribution of standard points in a nonstandard model. (83c:03059)

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Perkins, Edwin Weak invariance principles for local time. (83h:60080)
(Softrow, VI.) See Uspenskii, V. A., (83h:63106)
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Wattenberg, Frank. See Henson, C. Ward, (83c:03059)

26E99 None of the above, but in this section

secondary classifications:

Geiser, J. R. Rational constructive analysis. (834:03067)
Guo, Ben Yu A class of analytical problems in Banach space. (Chinese) (83g:46042)
Markov, Svetoslav M. Calculus for interval functions of a real variable. (German mary) (83d:65142)

Mycielski, Jan Analysis without actual infinity. (83h:03015)
Shcherbin, V. M. See Sobolev, V. I., (83h:58015)
Sobolev, V. I. (with Shcherbin, V. M.) Local invertibility of mappings of K-spaces.

rd An intuitionistic infinitesimal calculus. (83a:03063)

28-XX MEASURE AND INTEGRATION { For analysis on manifolds, see 58-XX.)

28-01 Elementary exposition, textbooks

Chae, Soo Bong

Lebesgue integration. 83e:28001

Debeuvels, Paul

L'intégrale. (French) [The integral] 83h:28001

Malliavin, P.

Intégration et probabilités. Analyse de Fourier et analyse spectrale. (French) [Integration and probabilities. Fourier analysis and spectral analysis] 831:28001

Neubrunn, Tibor (with Riečan, Beloslav) ★Miera a integral. (Slovak) [Measure and integral] 83k:28001
 Riečan, Beloslav See Neubrunn, Tibor, 83k:28001

secondary classifications:

Amerio, Luigi ★Analisi matematica con elementi di analisi funzionale. Vol. III. (Italian)
[Mathematical analysis with elements of functional analysis. Vol. III] (83e:00001)
(Brehmer, Siegfried) See Riesz, Frigyes; et al., (83j:46002a) and

(Dhombres, N.) See Rudin, Walter, (83f:26001)
(Eule, Christine) See Rudin, Walter, (83e:26004)
Fomin, S. V. See Kolmogorov, A. N., (83e:46001)
Friedman, Avner **Foundations of modern analysis. (83h:46001)
Gvishiani, A. D. See Krifllov, A. A., (83h:46003)
(Hoffman, F.) See Rudin, Walter, (83f:26001)
Kirillov, A. A. (with Gvishiani, A. D.) **Theorems and problems in functional analysis.
(83h:46003) (R3h:46003)

(«міть Ромін, S. V.) ★Элементы теория функций и функций и функционального анализа. (Russian) [Elements of the theory of functions and functional analysis] (83a:46601)
(Lorenz, Martin) See Rudin, Walter, (83e:26004)

(Mai, Brigitte) See Riesz, Frigyes; et al., (83j:46002a) ar (83j:46002b)

tila, Pertti Fractals-geometry of irregular forms. (Finnish. English summary) (83g:00023)

(83):e0023)

Mawhin, Jean ★Introduction à l'analyse. (French) [Introduction to analysis] (83h:26003)

(Mcl'aden, Harold H.) See Kirlliov, A. A.; et al., (83h:46003)

Mikolás, Miklós ★Valós függvénytan és ortogonális sorok. (Hungarian) [Real functions and orthogonal series] (834:26003)

Riesz, Frigyes (with Sz.-Nagy, Bela) ★Vorlesungen über Funktionalanalysis. (German)

[Lectures on functional analysis] (83i-46002a)

(with Sz.-Nagy, Bela) ★Vorlesungen über Funktionalanalysis. (German) [Lectures on functional analysis] (83i-46002a)

(wim St.-Nagy, Bea) ** Vortesungen uber Funktionalamaysis. (German) [Lecture on functional analysis] (83)46002b)
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** Analyse reelle et complexe. (French) [Real and complex analysis] (83f:26001)
Sz.-Nagy, Bela See Riesz, Frigers, (83)-46002a) and (83)-46002b)
(Tikhomirov, V. M.) See Kolmogorov, A. N.; et al., (83a:46001)

28-02 Advanced exposition (research surveys, monographs, etc.)

28-03 Historical (must also be assigned at least one classification number from Section 01)

secondary classifications

(Cavalieri, Bonaventura) See Terregino, Giuseppe, (83f:01014)
(Darboux, Gaston) See Gispert-Chambax, Hélène, (83i:01038)
Dugae, Pierre See Taylor, Angus E., (83e:01053)
(Frechet, Maurice Renè) See Taylor, Angus E.; et al., (83e:01053)
Gispert-Chambaz, Hélène ★Camille Jordan et les fondements de l'analyse. (French)

[Camille Jordan and the foundations of analysis] (83:01038)

(Jordan, Camille) See Gispert-Chambaz, Hélène, (83:e01038)
(Jordan, Camille) See Gispert-Chambaz, Hélène, (83:e01038)
(Lebesque, Henri) See Taylor, Angus E.; et al., (83:e01053)
Taylor, Angus E. (with Dugac, Pierre) Quatre lettres de Lebesgue à Fréchet. (English

summary) [Four letters from Lebesgue to Fréchet] (83e:01053)
Terregino, Gluseppe On Cavalieri's principle. (Italian) (83f:01014)

Darboux, Gaston See Gispert-Chambaz, Helène, (83:01038) Lebesgue, Henri and Fréchet, Maurice René See Taylor, Angus E.; et al., (83e:01053)

28-04 Explicit machine computation and programs (not the theory of computation or programming)

28-06 Proceedings, conferences, etc.

achsmeyer, Jürgen) See Proceedings: Conference on Topology and Measure, 83m:28001

(Flachsmeyer, Jürgen) See Proceedings: Conference on Topology and Measure, 83m:28001 (Frolik, Zdeněk) See Proceedings: Conference on Topology and Measure, 83m:28001 (Kolzow, Dietrich) See Measure theory, 83k:28002 (Maharam, Dorothy) See Measure theory, 83k:28002 (Smirnov, Yu. M.) See Proceedings: Conference on Topology and Measure, 83m:28001 (Terpe, Frank) See Proceedings: Conference on Topology and Measure, 83m:28001 (Topsae, Flemming) See Proceedings: Conference on Topology and Measure, 83m:28001 Conference:

Measure Theory See Measure theory, 83k:28002
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28Axx Classical measure theory

28A05 Classes of sets (Borel fields, σ-rings, etc.), measurable sets, Suslin sets, analytic sets [See also 04A15, 26A21, 54H05.]

urgain, Jean A stabilization property and its applications in the theory of sections.

Cater, F. S. Choice sets and measurable sets. 83b:28001

Chu, J. T. A note on minimal rings and fields. 83j:28002

Dellacherie, C. Capacités, rabotages et ensembles analytiques. [Capacities, excoriations and analytic sets] 83m:28002

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Dubins, Lester E. A zero-one, Borel probability which admits of no countably additive extensions. 83k:28003

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Ganguly, D. K. A note on a perfect set which is not an S-net. 83j:28003

Grzegorek, Edward On some results of Darst and Sierpiński concerning universal null and universally measurable sets. (Russian summary) 83b:28002

Symmetric o-fields of sets and universal null sets. 83m:28003

Mauldin, R. Daniel Projective well-orderings and extensions of Lebesgue measure.

Poreda, Wieslawa
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An "Archimedean" paradox. 83s:28001
Salo, Pablo On the existence of measurable non-Borel sets. (Spanish. English summary)
83e:28002

Topone, Flemming On the geometrical structure of Lebesgue nullsets. (See 83):46005)

secondary classifications:

Boes, Duane (with Darst, Richard; Erdős, Paul) Fat, symmetric, irrational Cantor sets. (83:2:0003)

Cichos, Jacek On Banach numbers. (Russian summary) (834:63045)

Darst, Richard See Boes, Duane; et al., (834:26063)

Dehornoy, Patrick Non-contradiction relative de la conjecture de Borel. [Relative

consistency of the Borel conjecture] (83:63077)

Drewnowski, Lech (with Labuda, Iwo) A noncommutative Orlicz-Pettis type theorem. (83m:22003)

Erdős, Paul See Boes, Duane; et al., (83:26003)

Grad, S. (with Mägerl, G.) Disintegration of a measure with respect to a correspondence.

Hillard, Gérard Exemples de normes en théorie descriptive des ensembles. [Examples of norms in descriptive set theory] (83c-54053)

Krawczyk, Adam (with Pelc, Andrzej) On families of σ-complete ideals. (83j:03086)

Labuda, Iwo See Drewnowski, Lech, (83m:22003) Mägerl, G. See Graf, S., (83m:28010)

Plet, Andrzej See Krawczyk, Adam, (83):03086)
Pletfer, W. F. The spaces which contain an S-space. (83h:54805)

Sender, Wolfgang A duality principle. (83e:54027)

Srivatsa, V. V. A remark on analytic sets with e-compact sections. (83h:94003)

Measurable parametrizations of sets in product spaces. (83e:54035)

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28B05 Vector-valued measures and integrals [See also 46G10.]

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Weiss, Benjamin See Glasner, S., 83g.28038
Yokoi, Yoshitaka Remark on measurability for flows. 83b:28022

secondary classifications:

Brezin, Jonathan (with Moore, Calvin C.) Flows on homogeneous spaces: a new look. (83e:22009)

age, M. See Goldstein, Sheldon; et al., (83e:82023)

Dani, S. G. Invariant measures and minimal sets of horospherical flows. (83c:22009) Goldstein, Sheldon (with Misra, Baidyanath; Courbage, M.) On intrinsic randomness of dynamical systems. (83e:82023)

Kallenberg, Olav Convergence of nonergodic dynamical systems. (831:60059)
Misra, Baldyanath See Goldstein, Sheldon; et al., (83e:82023)
Moore, Calvin C. See Brezin, Jonathan, (83e:22009)

Parry, William Self-generation of self-replicating maps of an interval. (83:58080)

28D15 General groups of measure-preserving transformations

Eigen, S. J. On the simplicity of the full group of ergodic transformations. 83k:28017 The group of measure-preserving transformations of [0, 1] has no outer automorphisms. 83f:28015

Kharazishvili, A. B. Quasi-invariant measures. (Russian. English and Georgian maries) 83a:28025

Kopf, Christoph Negative nonsingular transformations. 83g:28039

ablatt, Joseph Uniqueness of invariant means for measure-preserving ansformations. 83a:28026

nov, A. V. Rectification of measurable actions of solvable Lie groups of type (R). (Russian) 83j:28017 hmidt, Klaus D. Spectra of ergodic group actions. 83m:28022

secondary classifications

Nakaoka, Minoru Periodic points on nilmanifolds. (83f:58063)
Osikawa, Motosige Centralizer of an ergodic measure preserving transformation. (83h:28026)

ith On the normalizer of certain subalgebras of group-measure factors.

Pansiot, J.-J. The Morse sequence and iterated morphisms. (83d:68070)
Rieffel, Marc A. Ergodic decomposition for pairs of lattices in Lie groups. (83g:22008)

Schmidt, Klaus D. Amenability, Kazhdan's property T, strong ergodicity and invariant means for ergodic group-actions. (83m:43001)
Ye, Yin Yu Directed graphs, indefinite equations and the problem of ergodicity for a family of random matrices. (Chinese. English summary) (83i:05036)

mer, Robert J. Ergodic theory, group representations, and rigidity. (83k:22033)

28D20 Entropy and other invariants

Adler, Roy L. (with Marcus, Brian) Topological entropy and equivalence of dynamical ns. 83h:28027

(Brooks, James K.) See Martin, Nathaniel F. G.; et al., 83k:28019
England, James W. See Martin, Nathaniel F. G., 83k:28019
del Junco, Andrés Finitary codes between one-sided Bernoulli shifts. 83j:28018 Kamiński, Brunon The theory of invariant partitions for Zd-actions. (Russian summary)

Komornik, Jozef See Komorniková, Magda, 83k:28018 Komorniková, Magda (with Komornik, Jozef) Entropy for noninvariant measures. (Russian summary) 83k:28018

Li, Tien Yien (with Misiurewicz, Michal; Pianigiani, Giulio; Yorke, James A.) No division implies chaos. 83i:28024

Marcus, Brian See Adler, Roy L., 83h:28027

Martin, Nathaniel F. G. (with England, James W.) *Mathematical theory of entropy.

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Michel, Horst Der topologische Aspekt in der Ergodentheorie. [The topological aspect in ergodic theory] 83k:28020

Misiurewicz, Michal See Li, Tien Yien; et al., 83i:28024

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Moulin Otlagnier, Jean (with Pinchon, Didier) The variational principle. 83j:28019
Parry, William (with Tuncel, Selim) On the classification of Markov chains by finite

Peters, Justin R. A discrete analogue of a theorem of Katznelson. 83b;28023

Pianigiani, Giulio See Li, Tien Yien; et al., 83b;28024

Piachon, Didler See Moulin Ollaguier, Jean, 83j;28019

Rudolph, Dandel J. A characterization of those processes finitarily isomorphic to a ulli shift. 83c:28014

Serwe, Boleslaw Some construction of measures with maximal entropy in Štil'man's example. (Russian summary) 834:28011

Tuncel, Selim See Parry, William, 83j:28020

Yorke, James A. See Li, Tien Yien; et al., 83i:28024

secondary classifications:

achard, F. Systèmes dynamiques topologiques associés à des automates récurrents. (English summary) [Topological dynamical systems associated with recurrent automata] (83::68101)

Block, Louis (with Coven, Ethan M.; Nitecki, Zbigniew) Minimizing topological entropy for maps of the circle. (83h:59058)

Blokh, A. M. Sensitive mappings of an interval. (Russian) (83k:58053)
Count, J. Invariant measures and topological entropy of complex stationary states of dynamic systems defined by piecewise monotonic endomorphisms of [0, 1].

(83)::58058)
Coven, Ethan M. See Block, Louis; et al., (83):58058)
Dobrushin, R. L. See Gray, Robert M.; et al., (83):54011)
Fried, David Entropy for smooth abelian actions. (83)::54078)
Gray, Robert M. (with Ornstein, D. S.; Dobrushin, R. L.) Block synchronization, sliding-block coding, invulnerable sources and zero error codes for discrete noisy

channels. (83]:94011)
rman, Michael-Robert Construction d'un difféomorphisme me topologique non nulle. (English summary) [Construction of a minimal diffeomorphism with nonzero topological entropy] (83c:58046)

Hofbauer, Franz The structure of piecewise monotonic transformations. (83k:58065)

in, Pl. On some functional equations from additive and nonadditive measur

IV. (83c:94013)

Komornik, Jozef See Komorniková, Magda, (83d:54032) Komorniková, Magda (with Komornik, Jozef) Regular mea pseudocompact spaces. (Russian summary) (83d:54032) Maile, Ricardo A proof of Pesin's formula. (83b:58042) ures and entropy on

maing, Anthony Curvature bounds for the entropy of the geodesic flow on a surface.
(834-59053)

Markley, Nelson G. (with Paul, Michael E.) Maximal measures and entropy for Z^o subshifts of finite type. (83c:54059)

Marton, K. The structure of isomorphisms of discrete memoryless correlated sources. (83a:94011)

Maschio, Giovanni Measures of uncertainty for a random variable: a characterization. (Italian summary) (83h:54009)

Misiurewicz, Michal Horseshoes for continuous mappings of an interval. (83h:58076)

Mori, Makoto The extension of Sarkovskii's results and the topological entropy in unimodal transformations. (834:58059)

ruhoff, David L. (with Shields, Paul C.) Channel entropy and primitive approximation. (83i:94014)

Nitecki, Zbigniew See Block, Louis; et al., (83h:58058)
Oren, Ishai Admissible functions with multiple disconti rities. (83k:54034)

Ornstein, D. S. See Gray, Robert M.; et al., (83;54011)
Paul, Michael E. See Markley, Nelson G., (83:54059)
Peters, Justin R. Entropy of automorphisms on L.C.A. gr
Shields, Paul C. See Neuhoff, David L., (83:54014) ms on L.C.A. groups. (83e:54038)

Softman, L. B. On the asymptotic behavior of e,8-entropy and e,8-dimension of a homogeneous Gaussian field. (Russian) (83g:60065)

28D99 None of the above, but in this section

chi, Toshihiro On a Bernoulli shift with nonidentical factor measures. 83i:28025 Douer, Franz (with Keller, Gerhard) Ergodic properties of invariant measures for piecewise monotonic transformations. 83h;28028

Keller, Gerhard See Hofbe Kerstan, Johannes (with

ler, Gerhard See Hofbauer, Franz. 83h:28028 stan, Johannes (with Wakolbinger, Anton) Ergodic decomposition of probability laws. 83d:28012

Mathew, Joseph (with Nadkarni, M. G.) On spectra of unitary groups arising from cocycles. 83j:28021

Moskvin, D. A. On the metric theory of automorphisms of a two-dimensional torus.
(Russian) 83b:28024

Nadkarni, M. G. See Mathew, Joseph, 83j:28021 Wakolhinger, Anton See Kerstan, Johannes, 83d:28012

secondary classifications:

Arthur, W. Brian Why a population converges to stability. (83e:92037)

Atencia, E. (with Martin-Reyes, F. J.) Condition A₁ and the maximal ergodic function in weighted spaces. (Spanish. English summary) (83m:42011)

Butle Nicolau, Nadal (with Trillas Ruiz, Enrique) Entropy and fuzzy integral.

(83g:94047)

Boyarsky, Abraham See Proppe, Harold, (83c:26001) Braun, Martin Mathematical remarks on the Van Allen radiation belt: a survey of old and new results. (834:76045)

Brin, Michael Ergodic theory of frame flows. (83m:58059)

Dekking, F. M. On the structure of self-generating sequences. (83 Fabec, R. C. Normal ergodic actions and extensions. (83a:22008)

es. (83e:10075)

stenberg, Harry Rigidity and cocycles for ergodic actions of semisimple Lie groups (after G. A. Margulis and R. Zimmer). (83):22003)

Galperin, G. A. On an entropy characteristic of ho interaction. (Russian) (83e:54036)

etric strong law of large numbers for homogeneous random.

interaction. (Russian) (83e:54036)
Gaposhkin, V. F. Multiparametric strong law of large numbers for homogeneous random fields. (Russian) (83e:60027)
Hall, Glen Richard A. C^{to} Denjoy counterexample. (83e:50092)
van Hemmen, J. L. Dynamics and engodicity of the infinite harmonic crystal. (834:82029)
Herman, Michael-Robert Résultats récents sur la conjugaison différentiable. [Recent results on differentiable conjugation] (830:50050)
Jakobson, M. V. Absolutely continuous invariant measures for one-parameter families of cone-dimensional maps. (83):58070)
Jonker, Leo (wtth Rand, David A.) Bifurcations in one dimension. I. The nonwanderius.

Jonker, Leo (with Rand, David A.) Bifurcations in one dimension. I. The nonwandering set. (834:58057a)

Kalikow, Steven A Poisson random walk is Bernoulli. (#3b:60005)

Ledrappier, François Some relations between dimension and Lyapounov exponents. (83h:58044)

Propriétés ergodiques des mesures de Sinal. (English summary) [Ergodic properties of Sinal measures] (R3g:58035) (Margulis, G. A.) See Furstenberg, Harry, (83j:22003) Martin-Reyes, F. J. See Atencia, E., (83m:42011) Mendès France, Michel Principe de la symétrie perturbée. [The principle of perturbed

symmetry] (83e-10097)
shrewicz, Michal Strange attractors for the Lozi mappings. (83e-59070)
Structure of mappings of an interval with zero entropy. (83j:59071)

Absolutely continuous measures for certain maps of an interval. (83):58072)

Ohno, Taijiro Note on differentiable maps and Liapunov index. (83):58085)

Proppe, Harold (with Boyarsky, Abraham) On the fullness of surjective maps of an interval. (83:26001)

interval. (83c:26001)
Pugh, Charles C. (with Shub, Michael) Suspending subshifts. (83k:58078)
Rand, David A. Ser Jonker, Leo, (83d:58057a)
Rao, M. Bhaskara Mixtures of invariant nonergodic probabilities. (83h:66004)
Reddy, William L. Expanding maps on compact metric spaces. (83d:54070)
Scholz, H. J. Markov chains and discrete chaos. (83k:58049)

Shub, Michael See Pugh, Charles C., (83h:58078)

Starkov, A. N. On the density of the orbits of a fixed point on a homogeneous space. (Russian. English summary) (834:54072)

ngrand, Michel Ergodic measures, almost periodic points and discrete orbits. (836:43602)

Tomova, A. V. Invariant properties of numbers in different number systems. (Bulgarian. English and Russian summaries) (838:10052)

Trillas Ruiz, Enrique See Batle Nicolau, Nadal, (83g:34047)

Westman, Joel J. Sums of dependent random variables. (83j:60010)

Zakowski, Wojciech On a concept of (a, k)-computation. (Russian summary)

(83e:26013)

er, Robert J.) See Furstenberg, Harry, (83j:22003)

30-XX FUNCTIONS OF A COMPLEX VARIABLE (For analysis on manifolds, see 58-XX.)

30-01 Elementary exposition, textbooks

(Caraman, Petru) See Mayer, Octav, 83d:30001 (Goodman, G. S.) See Nevanlinna, Rolf; et al.,

(Goodman, G. S.) See Nevanlinna, Rolf; et al., 83±30002 (Kövari, T.) See Nevanlinna, Rolf; et al., 83±30002 (Krzyż, Jan (with Ławrynowicz, Julian) ★Elementy analizy zespolonej. (Poliah) [Elements

Krzyk, Jan (with Lawrynowicz, Julian) ★Elementy analizy zespolonej. (Polish) [Elements of complex analysis] 83c:30001

Lawrynowicz, Julian See Krzyk, Jan, 83c:30001

Mayer, Octav ★Teoria funcțiilor de o variabilă complexă. (Romanian) [Theory of functions of a complex variable] 83d:30001

Nevanlinna, Rolf (with Panatero, Veikko) ★Introduction to complex analysis. 83d:30002

Paatero, Veikko See Nevanlinna, Rolf, 83d:30002

Segal, Samford L. ★Nine introductions in complex analysis. 83b:30001

Amerio, Luigi *Analisi matematica con elementi di analisi funzionale. Vol. III. (Italian) [Mathematical analyais with elements of functional analyais. Vol. III] (83e:00001) (Aujeszky, Lászkó) See Pólya, George; et al., (83d:000096) (Dhombres, N.) See Rudin, Walter, (83f:26001) Dieudome, Jean Alexandre *Éléments d'analyse. Tome I. (French) [Elements of analysis. Vol. I] (83d:00002)

Krasnov, M. L. (with Kiselev, A. I.; Makarenko, G. I.) ЖФуживия комплексного переменного. Операционное всивсление. Теория устойчивости. (Russian) [Functions of a complex variable. Operational calculus. Stability theory] (#3£00007) (Nagy, Zeigmond) See Pólya, George; et al., (#3£00007) (Nagy, Zeigmond) See Pólya, George; et al., (#3£00009a) (with Szegő, Gábor) ★Feladatok és tételek az analizis köréből. I. (Hungarian) [Problems and theorems concerning analysis. I] (#3£00009a) (with Szegő, Gábor) ★Feladatok és tételek az analizis köréből. II. (Hungarian) [Problems and theorems concerning analysis. II] (#3£00009b) (Rudin, Watter ★Analyse réelle et complexe. (French) [Real and complex analysis] (#3£20001)

Szegő, Gábor See Pólya, George, (83&00009a) and Pólya, George, (83&00009b)

30-02 Advanced exposition (research surveys, monographs, etc.)

Campbell, Douglas M. (with Clunic, James G.; Hayman, Walter K.) Research problems in complex analysis. 836:36002
Clunic, James G. See Campbell, Douglas M.; et al., 836:36002
Hayman, Walter K. See Campbell, Douglas M.; et al., 836:30002
Zalcman, Lawrence Modern perspectives on classical function theory. 83d:30003

Apanasov, B. N. See Krushkal', S. L.; et al., (83m:30032)
Garnett, John B. *Bounded analytic functions. (83g:30037)
Gunerskii, N. A. See Krushkal', S. L.; et al., (83m:30032)
Krushkal', S. L. (with Apanasov, B. N.; Gusevskii, N. A.) *Kacimonsi rpymmi n

увифоражжанция в примерах и задачах. (Russian) [Kleinian groups and uniformization in examples and problems] (83m:30032)
Sworov, G. D. *Метрическая теория простых концов и граничные свойства плоских отображений с ограниченными витегралами Дирихле. (Russian) [The metric theory of prime ends and boundary properties of plane mappings with bounded Dicible integrable (84:24007). Dirichlet integrals] (83s:30027)

30-03 Historical (must also be assigned at least one classification number from Section 01)

Abikoff, Wifliam The uniformization theorem. 83a:30001
Pfluger, Albert Die Bedeutung der Arbeiten Christoffels für die Funktionentheorie. (English summary) [The importance of Christoffel's works for function theory]

secondary classifications:

(Bolyai, János) See Weszely, Tibor, (83m:01032)

ny, Jeremy Les trois suppléments au Mémoire de Poincaré, écrit en 1880, sur les fonctions fuchsiennes et les équations différentielles (English summary) [The three supplements to Poincaré's Mémoire, written in 1880, on Fuchsian functions and differential equations (83g-01027)

Markushevich, A. I. Some questions concerning the history of the theory of analytic functions in the nineteenth century. (Russian) (83d-01036)

Riemann und Weierstraß. Eine Übersicht mit zwei Quellenstudien. [On the interaction between the French School, Riemann and Weierstrass. A survey with two source studies] (83a:01030)

(Poincaré, Henri) See Gray, Jeremy, (83g:01027)

Weszely, Tibor On the paper "Responsio" by János Bolyai. (Romanian) (83m:01032)

30-04 Explicit machine computation and programs (not the theory of computation or programming)

secondary classifications:

Brent, Richard P. (with van de Lune, J.; te Riele, H. J. J.; Winter, D. T.) On the zeros of the Riemann zeta function in the critical strip. II. (83m:10067) van de Lune, J. See Brent, Richard P.; et al., (83m:10067) te Riele, H. J. J. See Brent, Richard P.; et al., (83m:10067)
Winter, D. T. See Brent, Richard P.; et al., (83m:10067)

30-06 Proceedings, conferences, etc.

(de Bruin, Marcel G.) See Padé approximation and its applications, 83b:30003
(Korniichuk, M. P.) See Geometric theory of functions and topology, 83b:30003
(van Rossum, Herman) See Padé approximation and its applications, 83b:30003
(Tutschke, Wolfgang) See Complex analysis and its application to partial differential equations, 83b:30001
(Yang, Chung Chun) See Factorization theory of meromorphic functions and related topics, 83b:30002

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mplex analysis and its application to partial differential equations
Komplexe Analysis
und ihre Anwendung auf partielle Differentialgleichungen. Teile 1-3. (German)
[Complex analysis and its application to partial differential equations. Parts 1-3]
83b:30001a

★Komplexe Analysis und ihre Anwendung auf partielle Differentialgleichungen.
Teil 4. (German) [Complex analysis and its application to partial differential equations. Part 4] 83h:30001b

Complex Analysis and its Application to Partial Differential Equations *Komplexe
Analysis und ihre Anwendung auf partielle Differentialgleichungen. Teile 1-3.
(German) [Complex analysis and its application to partial differential equations.
Parts 1-3] 83k:30601a

Parts 1-3] 83h:30001a

*Komplexe Analysis und ihre Anwendung auf partielle
Differentialgleichungen. Teil 4. (German) [Complex analysis and its application to
partial differential equations. Part 4] 83h:30001b

Padé Approximation and its Applications
*Pade approximation and its applications,
Amsterdam 1980. 83h:30003

ctorization theory of meromorphic functions and related topics. *Factorization theory
of meromorphic functions and related topics. 83h:30002

ometric theory of functions and topology *Геометрическая теория функций и топологии. (Russian) [Geometric theory of functions and topology] 83%:30003

See Complex analysis and its application to partial differential equ

mplexe Analysis und ihre Anwendung auf partielle Differentialgleichungen Sec Complex analysis and its application to partial differential equations, 83h:30001

Approxim

Pade approximation and its applications ★Pade approximation and its applications, Amsterdam 1980. 83b:30003

secondary classifications:

Towards the Revival of the Complex Method in Fourier Analysis See Towards the revival of the complex method in Fourier analysis, (83d:42002)

Towards the revival of the complex method in Fourier analysis *Towards the revival of the complex method in Fourier analysis. (Japanese) (83d:42002)

30Axx General properties

30A05 Monogenic properties of complex functions (including polygenic and areolar monogenic functions)

el Some notes on the factorial series $x^{(n)}$. (Portuguese, English summary) (See 83k:00005b)

secondary classifications:

Fuglede, Bent Fine topology and finely holomorphic functions. (83c:31002)

Koval'ov, V. F. (with Mel'nichenko, Î. P.) Biharmonic functions on the biharmonic plane. (Russian. English summary) (83c:30058)

Mel'nichenko, İ. P. See Koval'ov, V. F., (83c:30058)

Sommen, F. A generalized version of the Fourier-Borel transform. (83c:46038)

Stel'mashuk, N. T. A condition of the total differential for hypercomplex functions. (Russian. English summary) (83d:30056)

30A10 Inequalities in the complex domain

secondary classification

Aziz, Abdul Inequalities for polynomials with a prescribed zero. (83j:30004)

Bagiyan, R. A. Generalization of S. N. Bernstein's inequality and B. M. Levitan's polynomials. (Russian. English and Armenian summaries) (83b:39042) Formula for the inversion and refinement of a generalized S. N. Bernste

uality. (Russian. Armenian summary) (83e:30028)

Harris, Lawrence A. Coefficient inequalities for L*-valued analytic functions. (83e:30002)

Hu, Ke On an inequality and its applications. (83m:26019)
Khavinson, S. Ya. On a class of sharp inequalities for polynomials, moments and analytic functions. (Russian) (83b:30031)

30A99 None of the above, but in this section

Yankov, P. A method for finding the index of functions. (Bulgarian. English and Russian summaries) 83f:30001

Rečkovski, Nikola Une fonction analytique définie par une distribution. (Macedonian summary) [An analytic function defined by a distribution] (83i:46045)

30Bxx Series expansions

30B10 Power series (including lacunary series)

der Two theorems on truncations of the Laurent series. 83c:30003 (with Johnston, Elgin H.) Zeros of partial sums of the Laurent series of analytic functions. 83g:30001

Berkson, Earl Note on the Taylor series and growth of means. \$3\pmu.30004 Campbell, Douglas M. See Hwang, Jun Shung, \$3\pmu.30001 Cowling, V. F. (with King, J. P.) Detection of singular points. \$3\pmu.30001

Gopal, K. (with Kapoor, G. P.) Coefficient characterizations for functions analytic in the unit disc having fast rates of growth. 83e:30001

Harris, Lawrence A. Coefficient inequalities for L^p-valued analytic functions. 83e:30002 Hwang, Jun Shung (with Campbell, Douglas M.) Annular functions and gap series. 83k:30001

Johnston, Elgin H. See Abian, Alexander, 83g:30001 Juneja, O. P. See Srivastava, G. S., 83a:30002

Kapoor, G. P. See Gopal, K., 83e:30001

King, J. P. See Cowling, V. F., 83m:30001 Oskolkov, K. I. Partial sums of the Taylor series of a bounded analytic function. (Russian) 83c:30004

A note on nonlinearizable analytic functions. 83m:30902

Sheremeta, M. M. On the maximal term and the central index of the power expansion of a function that is analytic in the disc. (Russian) 83f:30002

Sons, L. R. Gap series—growth, normality, and values assumed. 83b:30004 Srivastava, G. S. (with Juneja, O. P.) The maximum term of a power series. 83a:30002

Bridges, Douglas S. (with Calder, Allan; Julian, William; Mines, Ray; Richman, Fred) Picard's theorem. (83h:03088)

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un, Paul S. Generalization of a problem of Gould and its solution by a contour

Caller, Allan See Bridges, Douglas S.; et al., (83h:03088)
Christensen, Jens Peter Reus (with Ressel, Paul) Positive definite kernels on the complex Hilbert aphere. (83j:43005)

utti, B. (with Lyness, J. N.) An acceleration method for the power series of entire

functions of order I. (33):65011)

Gawronski, Wolfgang (with Stadtmüller, U.) On the zeros of power series with exponential logarithmic coefficients. (83a:30008)

Gogal, K. See Kapoor, G. P., (83-30020)

Israllov, M. I. The Laurent expansion of the Riemann zeta function. (Russian)

(83m:10699)

Julian, William See Bridges, Douglas S.; et al., (83h:03688)

Kapoor, G. P. (with Gopal, K.) On the maximum term and rank of analytic functions and their derivatives. (88e:30020)

Appendix Gans in the Fourier series of automorphic forms.

(R3h:10060a)

Lehner, Joseph See Knopp, Marvin I., (83h:10060a) Lyness, J. N. See Gabutti, B., (83/:65011)

Metzger, Thomas A. Gaps in the Fourier series of automorphic forms. II. (83h:10060b) Mines, Ray See Bridges, Douglas S.; et al., (83h:03088) Mural, Takafumi On lacunary series. (83e-42019)

tković, L. (with Petković, Miodrag) The repres entation of complex circular functions using Taylor series. (83d:30009)

Petković, Miodrag See Petković, L., (83d:30009)

Prather, C. L. See Shaw, J. K., (83h:30008)

Ressel, Paul See Christensen, Jens Peter Reus, (83):43005) Richman, Fred See Bridges, Douglas S.; et al., (83h:03088)

Shaw, J. K. (with Prather, C. L.) Zeros of successive derivatives of functions analytic in a

neighborhood of a single pole. (83h:30008) Stadtmüller, U. See Gawronski, Wolfgang, (83a:30008)

30B20 Random power series

Murai, Takafumi The value-distribution of random Taylor series in the unit disk.

30B30 Boundary behavior of power series, over-convergence

Alpar, L. Sur certains changements de variable des séries de Faber. [Certain changes of variables in Faber series] 83i:30001

Deak, J. On the Cesaro summability of power series on the circle of convergence. 83a:30004

Kahane, Jean-Pierre Sur les séries de Taylor et les transformations de Möbius. (English summary) [On Taylor series and Möbius transformations] 83j:30002

secondary classifications:

Hlawka, Edmund Über einige Reihen, die mit den Vielfachen von Irrationalzahlen zusammenhängen. II. [On some series that are connected with the multiples of irrational numbers, II] (83e:10053)

neja, O. P. See Srivastava, G. S., (83a:30002)

Siméon, Jean Sur l'ultraconvergence des éléments C-dirichlétiens. [On the ultraconvergence of C-Dirichlet elements] (83h:30005)

Small, Robert D. Modified convergence of Taylor series. (83g:26009)
Srivastava, G. S. (with Juneja, O. P.) The maximum term of a power series. (83a:36002)
Warlimont, Richard Estimation of an integral. (83i:46009)

30B40 Analytic continuation

Černý, Ilja Two problems concerning inverse analytic functions. (Czech summary)

mirez Labrador, José A method for the study of some types of multivalued functions.
(Spanish) (See 83k:00005b)

folomeer, A. L. Analytic continuation from a continuum onto its neighborhood. (Russian. English summary) 83e:30003

secondary classifications:

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danova, N. (with Kupenova, T.) A numerical method for analytic continuation of holomorphic functions outside the real axis. (Russian. English and Bulgarian summaries) (83e:65051)

Clma, Joseph A. (with Globevnik, Josip) Analytic continuation on complex lines. (83h:32014)

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Epstein, Henri (with Lascoux, J.) Analyticity properties of the Feigenbaum function.

nan, K. (with Moskovitz, H.) Conditions for extension of some classes of square-summable analytic functions. (83k:30052)
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30B50 Dirichlet series and other series expansions, exponential series [See also 40-XX, 41-XX, 42-XX.]

Blambert, Maurice (with Parvatham, Kajagopalan) Sur la localisation des points singuliers des fonctions définies par des éléments L-dirichlétiens. (English summary) [On the localization of singularities of functions defined by L-Dirichlet elements]

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30B60 Completeness problems, closure of a system of functions

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Haruki, Shigeru On the theorem of S. Kakutani-M. Nagumo and J. L. Walsh for the mean value property of harmonic and complex polynomials. (83\cute.30025)

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30C15 Zeros of polynomials, rational functions, and other analytic functions (e.g. zeros of functions with bounded Dirichlet integral) {For algebraic theory, see 12D10; for real methods, see 26C10.}

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Kodama, Yuji Notes on certain matrices related to the zeros of the polynomials (83g:33007)

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30C40 Kernel functions and applications

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30C45 Special classes of univalent and multivalent functions (starlike, convex, bounded rotation, etc.)

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30Fxx Riemann surfaces

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30F10 Compact Riemann surfaces and uniformization [See also 14H15, 32G15.1

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ha, R. R. The Riemann-Roch theorem for compact Riemann surfaces. (83:14023) igawa, Nobumasa Compact Riemann surfaces with an automorphism group of order p. (83±14018)

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ola, Robert D. M. Plane models for Riemann surfaces admitting certain half-canonical linear series. I. (83b:14006a)

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30F30 Differentials on Riemann surfaces

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noki, Yukio Differentiability of period matrices in Teichmüller spaces. (83k:32034) or, Tilla Klotz Classifying harmonic maps of a surface in E". (83k:58036) H. (with Schiller, J.) A number-theoretic proof of a theorem of Tsuji. (83a:14027)

Part, H. (with Scaller, J.) A number-uncoreuc proof of a theorem of Tsuji. (83a:14027)
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30F35 Fuchsian groups and automorphic functions [See also 10Dxx, 20H10, 32Gxx, 32Nxx.]

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Abikoff, William A geometric property of Bers' embedding of the Teichmüller space. (83g:32023)

Akemann, Charles A. Operator algebras associated with Fuchsian groups. (83a:22004)
Aulaskari, Rauno (with Sorvali, Tuomas) On rotation-automorphic functions.

Beardon, Alan F. Lie products, closed geodesics and Fuchsian groups. (83m:53064)
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30F99 None of the above, but in this section secondary classifications:

Ahern, Patrick (with Rao, N. V.) A note on real orthogonal measures. (83j:46063) Gilman, Jane Determining Thurston classes using Nielsen types. (83m:57008) Gunning, Robert C. On generalized theta functions. (83g:14022)

Harris, C. J. (with Valença, J. M. E.) The generalised principle of the argument and the stability of multivariable systems. (83k:93064)

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Lyzzalk, Abdallah (with Styer, D.) A covering surface conjecture of Brannan and Kirwan. (83d:30018)

Masur, Howard Dense geodesics in moduli space. (83b:32020)
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Nuttall, J. Hermite-Padé approximants to functions meromorphic on a Riemann surface. (83b:30039)

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30G05 Non-Archimedean function theory [See also 12J25.]

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eva, N. O. (with Belova, M. M.) Integral representation of p-analytic functions with characteristic $p = p_0(x)y^k$. (Ukrainian. English and Russian st

Safarov, D. Doubly periodic generalized analytic functions. (Russian. Tajiki summary)

Tutschke, Wolfgang A combination of Rothe's method and methods of complex analysis in the theory of nonlinear instationary processes in the plane. 834:30054

Baltaev, S. On the existence of periodic solutions of a nonlinear generalized

Hatzaev, S. On the existence of periodic solutions of a nonlinear generalized Cauchy-Riemann system. (Russian. Tajiki summary) (834:35048)
Berglez, Peter *Allgemeine Darstellungssätze bei einer Klasse verallgemeinerter Euler-Gleichungen. (German) [General representation theorems for a class of generalized Euler equations] (83):35023)
Chernyaev, A. P. Construction of basic solutions of a first-order generalized Cauchy-Riemann system with a coefficient that depends on a variable according to the hypertameential law (Russian). (250-25016)

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Kvitko, A. N. (with Panchenko, I. F.) The Riemann problem for a system of first-order differential equations of elliptic type in the space L_p. (Russian) (83b:30046)

Machida, Hajime On closed sets of three-valued monotone logical functions. (83d:03028)

Monakhov, V. N. Nonlinear equations, strongly elliptic in M. A. Lavrent'ev's sense (L-elliptic). (Russian) (83b:39055)

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Pakharwa, N. O. (with Oleksandrovich, Î. M.) Representation of p-wave functions in the form of linear combinations of wave functions and their derivatives. (Russian) (B)(1503)

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is Remarks about certain first-order linear PDE in two variables.

schke, Wolfgang A problem with initial values for generalized analytic functions that are time-dependent (generalizations of the Cauchy-Kovalevskaya and Holmgren theorems). (Russian) (Edic35062)

Wen, Guo Ohan The Poincare boundary value problem with nonpositive indices for linear elliptic systems of second order. (Chinese. English summary) (83(38069) Wendland, W. L. Funktionentheoretische Methoden bei partiellen

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Auperit, Bernard Some applications of analytic multivalued functions to Banach algebras. (83b:46062)

Burbea, Jacob Operator-valued Pick's conditions and holomorphicity. (83k:32013)

Fuglede, Bent Sur les fonctions finement holomorphes. (English summary) [Finely holomorphic functions] (83e:31003)

Fukahara, Masuo Vector space of finite dimensions whose elements are B-valued analytic functions and its monodromy group. (Japanese) (83e:14006)

Globevalk, Josip Interpolation and the ranges of analytic maps into Banach spaces.

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Gohberg, Israel (with Rodman, Leiba) Analytic matrix functions with prescribed local data. (83):15019)

Ivanov, S. A. (with Pavlov, B. S.) Vector systems of exponentials and zeroes of entire

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en, F. Hypercomplex Fourier and Laplace transforms. I. (83g:46041) Xi Jin Some solutions of Maxwell equations. (83g:78006) Xiong, Xi Jin S

30G99 None of the above, but in this section

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Bazilevich, L. E. (with Pesin, I. N.) Two problems of Fréchet distance and the escape

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Shelds, Allen L. (with Williams, D. L.) Bounded projections and the growth of harmonic conjugates in the unit disc. 83k:30063

Stollov, P. Spaces of analytic functions that are noninvariant with respect to multiplication by inner functions. (Bulgarian. English and Russian summaries) 83e:30057 multiplicat

dis Castro, Concepción The maximum modulus principle in the algebra R(X). (Spanish. English summary) 83j:30055

michuk, S. D. Operator equations over spaces of analytic functions. (Russian) 83j:30056

Williams, D. L. See Shields, Allen L., 83h:30063

Zabullonis, A. On the imbedding operator in Bergman classes. (Russian. English and Lithuanian summaries) 83e:30057

Lithuanian summaries) 83e:30057 Zame, William R. See Rogers, James T., Jr., 83k:30050

secondary classifications:

Burbes, Jacob Polynomial approximation in Bers spaces of non-Carathéodory domains. (836:30036)

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mech, Juan José Some properties of the algebra of functions continuous in a compact set and analytic in an open set contained in the compact one. (Spanish. English summary) (See 83k:00005b)

Dales, H. G. (with Hayman, Walter K.) Esterle's proof of the Tauberian theorem for

Beurling algebras. (French summary) (83):43007)
Détraz, Jacqueline Caractérisation des espaces de Bergman. [Characterization of the

Bergman spaces (836-46031)

Dzhrbashyan, M. M. (with Rafaelyan, S. G.) Entire functions of exponential type of weighted L_p classes. (Russian. Armenian summary) (83k-30024)

Elseev, I. S. Permutability with a linear differential operator. (Russian) (83c-47048)

Forelli, Frank A note on ideals in the disc algebra. (83c-46041)

Foreit, Frank A note on ideals in the disc algebra. (83c-46041) Gerber, Eric Alan (with Weiss, Max L.) Interpolation, trivial and nontrivial homomorphisms in H^{∞} . (83b-46072) Glicksberg, Irving Equivalence of certain representing measures. (83j-46066) Hamilton, D. H. The extreme points of Σ . (83m:30012)

Hayman, Walter K. See Dales, H. G., (83j-43007)
Hervero Blanco, M. C. Spaces of holomorphic functions whose derivatives are extendable to a point of the boundary. I. (Spanish. English summary) (83g-46022)

Järvi, Pentti On certain algebras of analytic functions on Riemann surfaces. (83c:30047)
Kallenborn, Reiner (with König, Heinz) An invariant subspace theorem in the abstract
Hardy algebra theory. (83m:46077)

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König, Heinz Ser Kallenborn, Reiner, (83m:46077)

Kondrysh, V. F. (with Nagnibida, M. I.) Some operator equations in a class of continuous mappings of analytic spaces. (Russian) (83g-47012)
Lyubarskii, Vu. I. Completeness of linear combination

binations of simple fractions. (Russian) (83£30003)

Matsuoka, Cho-ichiro Bounded harmonic fi Shilov boundary of H[∞](W). (83±46066) nded harmonic functions and the Dirichlet problem on the

Mira López, Juan A. Spaces of holomorphic functions with asymptotic expansion. (Spanish. English summary) (83m:46033)

Nagnibida, M. I. Invariant subspaces of some operators in analytic spaces. (Russian)

(83b:47043)

On Volterra operators that satisfy some relations. (Russian) (83a:47038) See also Kovdrysh, V. F., (83g:47012)

Napalkov, V. V. Discrete weakly sufficient sets in some spaces of entire functions.
(Russian) (834:30006)

Nusser, H. See Reik, H. G.; et al., (83k:81119)
Ollinyk, N. P. On equivalence of some integral operators in spaces of analytic functions. (Russian) (83c:47050)

amonov, P. V. Interrelation of local and global approximations by holomorphic functions. (Russian) (83h:30046)

Pilidi, V. S. On a class of Hardy-type spaces of operator-valued functions. (Russian) (83f:46061)

Rafaelyan, S. G. See Dzhrbashyan, M. M., (83h:30024)
Relk, H. G. (with Nusser, H.; Ribeiro, L. A. Amarante) Exact solution nonadiabatic model Hamiltonians in solid state physics and optics. (83k:81119) a Renteln, Michael) See Sznajder, Roman, (83d:46064)

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A. Amarante See Reik, H. G.; et al., (83k:81119)

(von Rentein, Michael) See Szanjoer, Roman, (836:4004)
Ribeiro, L. A. Amarante See Reik, H. G.; et al., (836:81119)
Savoyant, Michel Une remarque sur une classe d'algèbres de Dirichlet faibles ° de fonctions analytiques. [A remark on a class of weak-° Dirichlet algebras of analytic functions] (83b:46075)

amoyan, F. A. Applications of Dzhrbashyan integral representations to some problems

Shamoyan, F. A. Applications of Dzhrbashyan integral representations to some problems of analysis. (Russian) (83b:30044)
 Shelburne, Brian J. The operator M, on Hilbert spaces of analytic functions. (83j:47024)
 Srivastava, J. K. (with Srivastava, K.) An algebra of analytic functions. (Serbo-Croatian summary) (83e:46046)
 Srivastava, K. See Srivastava, J. K., (83e:46046)
 Sznajder, Roman Remark on paper: "Finitely generated ideals in the Banach algebra H⁶⁰" [Collect. Math. 26 (1975), no. 2, 115-126; MR 55 #1075] by M. von Renteln.

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Tolokonnikov, V. A. Estimates in the Carleson corona theorem, ideals of the algebra H[∞], a problem of Sz.-Nagy. (Russian. English summary) (83d-46065)

Trent, Tavan T. (with Wang, James Li Ming) The uniform closure of rational modules.

Tsarkov, M. Yu. Roots of the power of the operator of generalized integration. (Russian) (834:47038)

Villone, Arnold L. Selfadjoint extensions of symmetric Vinogradov, S. A. See Khrushchëv, S. V., (83b:30032) etric operators. (83g:47027)

Valogradov, S. A. See Austrantev, S. V., (200-2002).
Vol'berg, A. L. The comparative strength of integral norms on subspaces of pseudocontinuable functions in the space H². (Russian) (83f:46062)
Wang, James Li Ming See Trent, Tavan T., (83a:46056)
Weiss, Max L. See Gerber, Eric Alan, (83b:46072)

Wirths, Karl-Joachim On holomorphic functions satisfying $|f(z)|(1-|z|^2) \le 1$ in the unit disc. (83c:30030)

Zame, William R. The classification of uniform algebras on plane domains. (83c:46043)

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31-XX POTENTIAL THEORY (For probabilistic potential theory, see 60J45.)

31-01 Elementary exposition, textbooks

Furuta, Yoshito See Hoshi, Seiichi, 83uc31001
Hoshi, Seiichi (with Furuta, Yoshito) Representation of harmonic functions in the
4-dimensional space by means of polar coordinates. 83uc31001

Ramsey, A. S. Newtonian attraction. 83b:31001

31-02 Advanced exposition (research surveys, monographs, etc.)

31-03 Historical (must also be assigned at least one classification number from Section 01)

secondary classifications:

Neuenschwander, Erwin Über die Wechselwirkungen zwischen der französischen Schule, Riemann und Weierstraß. Eine Übersicht mit zwei Quellenstudien. [On the interaction between the French School, Riemann and Weierstrass. A survey with two source studies] (83a:01030)

31-04 Explicit machine computation and programs (not the theory of computation or programming)

31-06 Proceedings, conferences, etc.

(Hirsch, Francis) See Seminar: Potential Theory, 83g:31001 (Mokobodzki, Gabriel) See Seminar: Potential Theory, 83g:31001

Potential Theory *Séminaire de Théorie du Potentiel, Paris. No. 6. (French) [Seminar on Potential Theory, Paris. No. 6] 83g:31001

31Axx Two-dimensional theory

31A05 Harmonic, subharmonic, superharmonic functions

Aksent'ev, L. A. (with Reshetnikov, Yu. A) Monotonicity of mean values of subharmonic functions in an annulus. (Russian) 83g:31002

indam, Victor See Premalatha, 83h:31001

Bratishchev, A. V. Some remarks on zero-order functions that are subharmonic in the plane. (Russian) 83i:31001

elin, T. W. Criteria for approximation by harmonic functions. 83m:31002

Genev, V. N. Normalized harmonic polynomials and some of their properties. (Bulgarian. English and Russian summaries) 83i:31002

Haruki, Shigeru On the mean value property of harmonic and complex polynomials.

83j:31001

Ishchanov, B. Zh. On a theorem of V. S. Fedorov. (Russian. English summary) 83g:31003

Premalatha (with Anandam, Victor) Subharmonic functions of genus zero in R². 83h:31001

Reshetnikov, Yu. A See Aksent'ev, L. A., 83g:31002
Ricci, Fulvio (with Taibleson, Mitchell H.) Representation theorems for harmonic

functions in mixed norm spaces on the half plane. 83b:31002

Rippon, P. J. Some remarks on largest subharmonic minorants. 83e:31001
Sakai, Makoto The sub-mean-value property of subharmonic functions and its application to the estimation of the Gaussian curvature of the span metric. 83a:31001
Taibleson, Mitchell H. See Ricci, Fulvio, 83b:31002

Ueda, Hideharu An extremal problem for subharmonic functions of $\mu_* \ge \frac{1}{2}$. 83c:31001

secondary classifications

Dveirin, M. Z. The Hardy-Littlewood theorem and approximation of harmonic functions Livern, M. Z. The Hardy-Littlewood theorem and approximation of harmonic functions in domains with a quasiconformal boundary. (Russian. English summary) (33h:30043) Gauthier, Paul M. (with Hengartner, Walter; Labrèche, M.) Approximation harmonique, approximation holomorphe et topologie. [Harmonic approximation, holomorphic approximation and topology] (82e:30045) Hengartner, Walter See Gauthier, Paul M.; et al., (83e:30045) Labrèche, M. See Gauthier, Paul M.; et al., (83e:30045) Marshall, Donald E. (with Stray, Arne; Sundberg, Carl) Nondiscriminating sets for H^{os.} (81e:30045)

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Schiff, J. L. (with Walker, W. J.) Finite-harmonic interpolation. (83k30052a)
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(Shamoyan, F. A. Applications of Dzhrbashyan integral representations to some problems of analysis. (Russian) (83k30046)
Stray, Arne See Marshall, Donald E; et al., (83j:30036)
Sundberg, Carl See Marshall, Donald E; et al., (83j:30036)
Thompson, Joe F. See Warsi, Z. U. A., (83d:65307)
Ueda, Hideharu On the minimum modulus of a subharmonic or an algebroid function of n. < 1/2 (832-30036)

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I wo results associated with spread relation. (83i:30043)
An extremal problem associated with the spread relation. (83m:30022)
Walker, W. J. See Schiff, J. L., (83i:30052a) and (83i:30052b)
Warst, Z. U. A. (with Thompson, Joe F.) A noniterative method for the generation of orthogonal coordinates in doubly-connected regions. (83i:466307)
Wermer, John Potential theory and function algebras. (83i:46639)
Yamashita, Shinji Functions with slowly-growing area and harmonic majorants. (83e:30037)

31A10 Integral representations

31A15 Potentials and capacity, harmonic measure, extremal length [See also 30C85.1

Feyel, Denis · Remarques sur un résultat de Choquet. [Remarks on a result of Choquet] 834:31003

Tamerarov, P. M. Capacities of condensers. A method of intermixing loads. (Russian) 83m:31003

Zarli, N. V. An analogue of the A. A. Gonchar problem on the circle. (Russian) 83h:31003

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Aksent'ev, L. A. (with Reshetnikov, Yu. A) Monotonicity of mean values of subharmonic

Sent et, L. A. (with Respetultov, Yu. A) Monotonicity of mean values of subharmonic functions in an annulus. (Russian) (83g-31602) andam, Victor See Presadatha, (83k-31601) cons, Alamo Comparaison des mesures harmoniques et des fonctions de Green pour des opérateurs elliptiques sur un domaine lipschitzien. (English summary) [Comparison of harmonic measures and Green functions for elliptic operators on a Lipschitz domain], (83k-39640)

domain; (80:33040)
Caffarelli, Luis A. (with Fabes, Eugene B.; Kenig, Carlos E.) Completely singular elliptic-harmonic measures. (83a:35033)
Fabes, Eugene B. See Caffarelli, Luis A.; et al., (80a:35033)
Galer, Dieter Das logarithmische Potential und die konforme Abbildung melarfach zusammenhängender Gebiete. (Engish summary) (The logarithmic potential and the conformal mapping of multiply connected domains) (83g:30007)
Karapetyants, N. K. (with Rubin, B. S.) Riesz radial potentials on the disc and fractional interesting concessions (Rhasipa).

integration operators. (Russian) (83k-42016)

Kenig, Carlos E. See Caffarelli, Luis A.; et al., (83a:35033)

Liao, Luby Certain extremal problems concerning module and harmonic measure.
(83i:30022)

McCoy, Peter A. Approximation of generalized biaxially symmetric potentials on certain domains. (83a:30039)

Oksendal, Bernt Brownian motion and sets of harmonic measure zero. (R3c:60106) Premalatha (with Anandam, Victor) Subharmonic functions of genus zero in \mathbb{R}^2 . (83k-31001)

(83h:31001)
Rethernikov, Yu. A. See Aksent'ev, L. A., (83g:31002)
Rubin, B. S. See Karapetyania, N. K., (83h:42016)
Shibata, Kelichi On the modulus of path-families. (83m:30014)
Unanyan, A. G. See Zakharyan, V. S., (83d:31001)
Zakharyan, V. S. (with Unanyan, A. G.) Variation of a potential of Green type on a segment. (Russian. Armenian summary) (83d:31001)

31A20 Boundary behavior (theorems of Fatou type, etc.)

Cruzeiro, Ana Bela Convergence quasi partout dans des domaines paraboliques des fonctions d'intégrale de Dirichlet finie. (English summary) [Convergence in parabolic domains outside a set of capacity zero for functions with finite Dirichlet integral] 836:31004

a The role of boundary Harnack principle in the study of Picard Tada, Tosh principle. 83k31004

ndary classifications:

Azarin, V. S. (with Giner, V. B.) On the construction of limit sets of entire and subharmonic functions. (Russian) (83s:30035)
Giner, V. B. See Azarin, V. S., (83s:30035)

Hwang, Jun Shung A difference between minimal and ordinary fine topology in function theory. (83h:30029)
 von Renteln, Michael Boundary behavior of positive harmonic functions in balls of R*.

(83a:31012)

Segal, Sandroft L. *Nine introductions in complex analysis. (83h:30001)

Shields, Allen L. (with Williams, D. L.) Bounded projections and the growth of harmonic conjugates in the unit disc. (83h:30063)
Williams, D. L. See Shields, Allen L., (83h:30063)

31A25 Boundary value and inverse problems

Cherednichenko, V. G. A problem on the conjugation of harmonic functions and its inverse. (Russian) 83h:31662

Gabor, S. A. The selfadjoint V. A. Steklov problem with oblique derivative. (Russian) R3f:31001

Ivanov, O. V. (with Suvorov, G. D.) The Dirichlet problem on some conformally riant bicompact extensions of a plane domain. (Russian. English summary) 836-31002

Suvorov, G. D. See Îvanov, O. V., 8M:31002 Unanyan, A. G. See Zakharyan, V. S., 834:31001 Zakharyan, V. S. (with Unanyan, A. G.) Variation of a potential of Green type on a segment. (Russian. Armenian summary) 834:31001

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Acker, Andrew On the convexity of equilibrium plasma configurations. (83g:76106)
Berman, Robert D. Elementary proofs of some asymptotic radial uniqueness theorer (834:30027)

nko, V. G. Univalent functions and the potential inverse problem. (Russian) (83g:30018)

See also Voronin, V. V., (834:86006)

Dudykevich, A. T. See Lyudkevich, I. V., (83:65215)
Gabov, S. A. (with Shevtsov, P. V.) On a problem that contains a spectral parameter in the boundary condition. (Russian) (83j:35041)

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Kupenova, T. See Georgiev, G.; et al., (83:e65046)
Lyudkevick, I. V. (with Dudykevich, A. T.) A method of so value problems of potential theory. (Russian) (83:e65215)
Meek, D. S. (with Mohsen, Adel A.) A treatment of corn od of solution of exterior boundary

nt of corner singularities in potential theory. (83c:65258)

sen, Adel A. See Meek, D. S., (83c:65258)

Nedyalkov, Iv. See Georgiev, G.; et al., (83c-65046)
Sadhal, S. S. Explicit solutions to a class of mixed boundary value problems. (83f-78018) w, P. V. See Gabov, S. A., (83j:35041)

rakhor, V. N. Physical interpretation and practical application of singular sources—complex-valued mass and multipole field. (Russian) (83h:86004) da, Toshimasa The role of boundary Harnack principle in the study of Picard

ciple. (831:31004) min, V. V. (with Cherednichenko, V. G.) Construction of equivalent solutions of an inverse gravimetry problem in the two-dimensional case. (Russian) (83486006)

31A30 Biharmonic, polyharmonic functions and equations, Poisson's equation

Pogu, Mare (with Tournemine, Georges) Étude et approche variationnelle d'équations biharmoniques posées dans des ouverts non bornés. (English summary) [Study and variational approach of biharmonic equations which act over unbounded open sets] 83a:31002

se, Georges See Pogu, Marc, 83a:31002

secondary classificati

ver, Bradley (with Sario, Leo; Wang, Cecilia) Spherical harmonics generating

bounded biharmonics. (83k31009)

Margessor, Svetozar D. Application of parabolic and cubic splines for solving boundary value problems of mixed type for a biharmonic equation in a rectangle. (Russian) (83ce65247)

Sario, Leo See Beaver, Bradley; et al., (83i:31009) Wang, Cecilia See Beaver, Bradley; et al., (83i:31009)

31A35 Connections with differential equations

(with Kanwal, R. P.) Solutions of potential problems in composite media by integral equation techniques. I. Derivation of integral equations. 83h:31003a (with Kanwal, R. P.) Solutions of potential problems in composite media by integral equation techniques. II. Two-dimensional problems. 83h:31003b Kanwal, R. P. See Jain, D. L., 83h:31003
Nakai, Mitsuru (with Tada, Toshimasa) Dirichlet integral and Picard principle. 83h:31001

sa See Nakai, Mitsuru, 83k:31001

secondary classifications:

Albinus, Günter Multiple layer potentials for general elliptic boundary value problems in a quadrant or its exterior. (83e:35044)

Bear, H. S. Initial values for parabolic functions. (83h:35054) Dzhabirov, D. K. See Radzhabov, N. R., (83h:35065)

Fryant, Allan J. Ultraspherical expansions and pseudo analytic functions. (83t:30063)

Laloy, M. (with Sayinzoga, A.) Sur une propriété des fonctions analytiques à deux variables réelles. [On a property of analytic functions of two real variables] (834:26011)

Margenov, Svetozar D. Application of parabolic and cubic splines for solving boundary value problems of mixed type for a biharmonic equation in a rectangle. (Russian) (83c:65247)

Radzhabov, N. R. (with Dzhabirov, D. K.) Potentials and their application to the investigation of boundary value problems for a second-order model elliptic equation with two singular lines. (Russian) (83b:35065)

Satō, Takeyoshi The equations $\Delta u = Pu$ (P > 0) on Riemann surfaces and isomorphisms between relative Hardy spaces. (83d:30048) Sayinzoga, A. See Laloy, M., (83d:26011)

31A99 None of the above, but in this section

31Bxx Higher-dimensional theory

31B05 Harmonic, subharmonic, superharmonic functions

Ancona, Alano (with Hayman, Walter K.; Wu, Jang Mei) The growth of harmonic

functions along a path in space. 83a:31003

Armitage, D. H. Domination, uniqueness and representation theorems for harmonic functions in half-spaces. 83a:31004

(with Fugard, T. B.) Subharn nic functions in strips. 83s

Bell, Steven R. A duality theorem for harmonic functions. 83m:31005

Détraz, Jacqueline Classes de Bergman de fonctions harmoniques. (English summary)

[Bergman classes of harmonic functions] 83m:31006

Fugard, T. B. See Armitage, D. H., 83m:31004

Fuglede, Bent Fine topology and finely holomorphic functions. 83e:31002

Hayman, Walter K. See Ancona, Alano; et al., 83a:31003

Kapoor, G. P. (with Nautiyal, A.) Approximation of entire harmonic functions in R⁰. BN:31002

On the method of spherical harmonics for subharmonic functions. (Russian) 83a:31005

Kuran, U. Some uniqueness theorems for harmonic functions in terms of their behaviour at one boundary point. 83j-31002

style, A. See Kapoor, G. P., 83k:31002 karanee, Sawai On the maximum principle for a subharmonic function in a cone.

abogin, A. K. Integral inequalities for conjugate harmonic functions. (Russian)

Harmonic functions of classes H_p . (Russian) 83i:31005

Schiff, J. L. A uniqueness theorem for superharmonic functions in Rⁿ. 83a:31006 Erratum to: "A uniqueness theorem for superharmonic functions in Rⁿ" [Proc. Amer. Math. Soc. 84 (1982), no. 3, 362–364; MR 83a:31006]. 83m≥31007

Watson, N. A. Mean values of superharmonic functions on half-spaces. 83k:31003 Wa, Jang Mei See Ancona, Alano; et al., 83a:31003

secondary classifications:

ksandrov, A. B. A-integrability of boundary values of harmonic functions. (Russian) (83):36039)
ea, De Quan See Ji, Xin Hua, (83):35050)

Ji, Xin Hua (with Chen, De Quan) A partial differential equation with a degenerate surface in an extended space of n dimensions. (Chinese. English summary) (836:35050) Maab, Hans Harmonische Formen in einer Matrixvariablen. [Harmonic forms in a atrix variable] (83g:31008)

Veselý, Jiří Sequence solutions of the Dirichlet problem. (Czech summary) (83h:31012)
Watanabe, Toitsu On extrapolation of minimal eigenvalue of Laplace differential

equation. (83s:35076)
nukhamedov, Sh. Green's formula for an infinite domain and its application.
(Russian) (83s:31007)

31B10 Integral representations

m, Victor See Premalatha, 83h:31004

Premalatha (with Anandam, Victor) The canonical potentials in R*. 83h:31004
Yarmukhamedov, Sh. Green's formula for an infinite domain and its application. (Russian) 83a:31007

secondary classifications:

Fabes, Eugene B. Various notions of the Hardy space, H1, of a C1-domain. (83a:31011)

31B15 Potentials and capacities, extremal length

vis, Burgess (with Lewis, John L.) The harmonic measure of porous membranes in R³.

83m:31008

Frostman, Otto (with Wallin, Hans) Riesz potentials on manifolds. 83i:31006 uz'min, S. K. See Temko, S. V., 83a:31010

Lewis, John L. See Davis, Burgess, 83m:31008

Mizuta, Yoshihiro Semifine limits and semifine differentiability of Riesz potentials of functions in L. 83a:31008

Nayar, B. M. Induced potential problem in three dimensions. III. Mixed boundary conditions. 83a:31009

Ohtsuka, Makoto An example of Newtonian potential. 83f:31004 Schiffer, M. M. See Aharonov, Dov; et al., 83d:31002

Temko, S. V. (with Kuz'min, S. K.) The stability of multicomponent systems. (Russian) 83e31010

n, Otto, 83i:31006

Yamamoto, Hiromichi On null sets for extremal distances of order p. 83d:31003
Zalcman, Lawrence See Aharonov, Dov; et al., 83d:31002
Zorli, N. V. Some properties of three-dimensional condensers. (Russian) 83d:31004

secondary classifications:

ms, David R. Capacity and the obstacle problem. (83f:49016)

Chegis, I. A. Determination of a potential connected with the solution of a system of Fredholm integral equations of the first kind. (Russian) (83j:45003)

ro, Ana Bela Convergence au bord pour les fonctions harmoniques dans R' de la classe de Sobolev W_i^d . (English summary) [Boundary convergence for harmonic functions defined on \mathbf{R}^d belonging to the Sobolev class W_i^d] (83g:31006)

rie, C. Capacités, rabotages et ensembles analytiques. [Capacities, excoriations

and analytic sets] (83m:28002)

Fabes, Eugene B. Various notions of the Hardy space, H¹, of a C¹-domain. (83a:31011)

Fu, L. S. (with Mura, T.) Volume integrals of ellipsoids associated with the inhomogeneous Helmholtz equation. (83a:76070)

Glasner, Moses (with Katz, Richard) Limits of Dirichlet finite functions along curves.

(83k:31007)

in, Friedel The physical nature of elastic layers. (German summary) (83f:73025a) Elastic potentials on piecewise smooth surfaces. (German summary) (83f:73025b)
Hedberg, Lars Inge Spectral synthesis in Sobolev spaces, and uniqueness of solutions of

the Dirichlet problem. (83g:46032)
Katz, Richard See Glasner, Moses, (83k:31007)

Mamedov, I. T. See Novruzov, A. A., (83f:35042)

Mumm, Harald Das Dirichlet-Problem in Hölder-Räumen. [The Dirichlet problem in Hölder spaces] (83b:35049)

Mura, T. See Fu, L. S., (83b:76070)

k, Jan On some three-harmonic potential for circular ring. (83e:35031)

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version, A. A. (with Mamedov, I. T.) On a removable singularity of solutions of linear elliptic equations with continuous coefficients. (Russian) (836:35042)

On the theory of the third boundary value problem for second-order linear elliptic

On the theory of the fund obtainary value proteem for second-order timear elliptic equations. (Russian) (83f:35943)

Ozawa, Shin Potential theory and eigenvalues of the Laplacian. (83g:58072)

Petrovskaya, M. S. Determination of Stokes's constants and a disturbing potential in terms of gravity anomalies. (Russian. English summary) (83a:86002)

Umarkhatzhiev, S. M. Complete continuity of multipliers in the scale of spaces of Riesz potentials. (Russian) (83m:46057)

31B20 Boundary value and inverse problems

Ermakov, V. G. An explicit formula for the index of a boundary value problem for a system of harmonic functions. (Russian. English summary) 83c:31003

Fabes, Eugene B. Various notions of the Hardy space, H¹, of a C¹-domain. 83a:31011

Fedoryuk, M. V. The Dirichlet problem for the Laplace operator in the exterior of a thin solid of revolution. (Russian) 83b:31005

Laird, P. G. On an inverse problem in potential theory. 83e:31002

Lorenzi, A. (with Pagani, C. D.) An inverse problem in potential theory. 83h:31005 Margulis, A. S. On potential theory in the classes $L_p(\Omega)$. (Russian) 83g:31005

ray, J. C. On the boundary value problem associated with a general twisted tube with Pagani, C. D. See Lorenzi, A., 83h:31005 Shestopalov, V. P. See VI a uniform nonrotating section. 834:31605

estopalor, V. P. See Vinogrador, S. S.; et al., 83b:31006 igren, Peter Espaces H^r , intégrales de Poisson et L^1 faible. [H^p spaces, Poisson integrals and L^1 weakness] 83e:31004

Tuchkin, Yu. A. See Vinogradov, S. S.; et al., 83b:31006
Vinogradov, S. S. (with Tuchkin, Yu. A.; Shestopalov, V. P.) On the solution of boundary value problems of potential theory for unclosed ellipsoids of revolution. (Russian. English summary) 83b:31006

secondary classifications:

Alexindes, Vasilios Generalized axially symmetric heat potentials and singular parabolic initial-boundary value problems. (83k:35043)

Anger, Gottfried Einige Betrachtungen über inverse Probleme, Identifikationsprobleme und inkorrekt gestellte Probleme. [Some reflections on inverse problems, identification problems and ill-posed problems] (83m:35143)

(with Czerner, Regine) An inverse problem for the heat conduction equation. II.

Arques, Didler (with Roth, Jean-Pierre) Charge portée par une surface et champ associé. [Charge carried by a surface and associated field] (83g:78007)

rlow, Martin T. (with Watson, N. A.) Irregularity of boundary points in the Dirichlet

problem for the heat equation. (Italian summary) (83k:35042) rezin, A. Yu. On the oblique derivative problem. (Russian) (83a:35032)

Determen, N. 14. On the conque derivative protein. (Russian) (Russ $P^n u(x) = 0.$ (834:35067)

(with Musialek, Jan) On a certain limit problem for the n-caloric equation $P^n u(X) = F(X)$. (834:35068)

Ji. Xin Hua (with Chen, De Quan) A partial differential equation with a degenerate surface in an extended space of n dimensions. (Chinese. English summary) (83f:35050) Landis, E. M. Uniqueness theorems for the solution of the Dirichlet problem for

second-order elliptic equations. (Russian) (83c:35035)

Lemmert, Roland Die erste Randwertaufgabe für $\Delta u = f(x, u)$ in Banach-Räumen. [The first boundary value problem for $\Delta u = f(x, u)$ in Banach spaces] (834:35158) first boundary value problem for $\Delta w = f(x, w)$ in Banach spaces] (83d:35158) Max'ya, V. G. (with Nazarov, S. A.; Plamenevskii, B. A.) On the asymptotic behavior of the solutions to the Dirichlet problem in a three-dimensional domain with a cut-out

thin body. (Russian) (834:35042) sialek, Jan See Filar, Maria, (83d:35067) and (83d:35068)

Nazarov, S. A. See Maz'ya, V. G.; et al., (83d:35042)

evskii, B. A. See Maz'ya, V. G.; et al., (83d:35042) Riska, D. O. On the electrodynamic inversion problem for vertically layered earth.

Roth, Jean-Pierre See Arques, Didler. (83g:78007)
Shail, R. A note on Neumann potential problems for a thin circular annulus. (83g:73076)
Sünkel, H. See Tscherning, C. C., (83f:86010)

Tscherning, C. C. (with Sünkel, H.) A method for the construction of spheroidal mass distributions consistent with the harmonic part of the Earth's gravity potential. (83f:86010)

Watson, N. A. See Barlow, Martin T., (83k:35042)
Wegmann, Rudolf Trefftz' integral equation method for free boundary problem of potential theory. (See 83j:65006)

31B25 Boundary behavior

Cruzeiro, Ana Bela Convergence au bord pour les fonctions harmoniques dans Re de la classe de Sobolev W_i^{st} . (English summary) [Boundary convergence for harmonic functions defined on \mathbb{R}^t belonging to the Sobolev class W_i^{st}] 83g:31006

Jerison, David S. (with Kenig, Carlos E.) The logarithm of the Poisson kernel of a C¹ domain has vanishing mean oscillation. 83k:31004
Kenig, Carlos E. See Jerison, David S., 83k:31004

Mizuta, Yoshihiro Boundary limits of Green potentials of order a. 83k:31005

On the boundary behavior of superharmonic functions in a half space. 83f:31005

Nichael Boundary behavior of positive harmonic functions in balls of R*.

Raa:31012

secondary classifications:

Il'in, A. M. The asymptotic behavior of the solution of a boundary value problem for the

Poisson equation outside of a cylinder and outside of a half cylinder. (Ru (83sc35043)

olomkas, Alg (83g:30056) Some generalizations of a holomorphic vector. (Russian)

amedov, I. T. See Novrazov, A. A., (R34:35043)

verazov, A. A. (wish Mamedov, I. T.) On the question of removable sets of the accord

and third boundary value problems for elliptic equations. (Russian. English summary) (834:35043)

rnazzani, Vittorio The Dirichlet problem for the Kolmogorov operator. (Italian. English summary) (83a:35047)

31B30 Biharmonic and polyharmonic equations and functions

González Suárez, Luis A. (with Wildenhain, Günther) On the representation of polyharmonic functions in a ball in R*. (Spanish. English summary) 83g:310 Pehelin, B. K. Generalization of F. Riesz's theorem for continuous subharmonic mary) 83e:31007

actions of arbitrary entire order. (Russian) 83a:31013 Wildeshain, Günther See González Suárez, Luis A., 83g:31007

secondary classifications:

Beaver, Bradley (with Sario, Leo; Wang, Cecilia) Spherical harmonics generating bounded biharmonics. (83i:31909)

mann, Uwe Einige Benerkungen zum Dirichlet-Problem für die polyharmonische Gleichung bei Gebieten mit Randteilen verschiedener Dimensionen. [Some comments on the Dirichlet problem for the polyharmonic equation in domains with boundary parts of different dimensions] (83g:35045)

bmann, Jürgen Eine Regularitätsaussage für die schwache Lösung der biharmonischen Gleichung in $\dot{W}^2(\Omega)$, wenn Ω ein konvexes Polyeder im \mathbb{R}^3 ist. (A regularity condition for the weak solution of the biharmonic equation in $\dot{W}^2(\Omega)$ when Ω is a convex polyhedron in R3 | (83i:35065)

polyneuron in F | (ass.53005)
Sario, Leo See Beaver, Bradley; et al., (83k31009)
Tavkhelidze, I. N. An analogue of Saint-Venant's principle for a polyharmonic equation and its applications. (Russian) (83m:35048)
Wang, Cecilia See Beaver, Bradley; et al., (83k31009)

31B35 Connections with differential equations

Dobrutvor, I. G. See Gorbaichuk, V. L., 83k:31006 Gorbaichuk, V. L. (with Dobrotvor, L. G.) Oscillation of the solutions of a class of

Gorbachus, V. I. (with Doprotvor, L. G.) Oscillation of the solutions of a class of equations with the polyharmonic operator. (Russian) 83k:31006

Hirohata, Tetsuya See Morinaka, Hisashi, et al., 83k:31006

Kaufman, Robert P. (with Wu, Jang Mei) Parabolic potential theory. 83k:31006

Morinaka, Hisashi (with Hirohata, Tetsuya; Nishimura, Takeshi) On approximation of harmonic functions in Brelot space. 83k:31006

Nishimura, Takeshi See Morinaka, Hinashi; et al., 83k:31006

Picard, Rainer Randwertaufgaben in der verallgemeinerten Potentialtheorie. (English summary) [Boundary value problems in generalized potential theory] 83k:31007

Wu, Jang Mei See Kaufman, Robert P., 83k:31006

secondary classifications:

Dubois, Roger-Marie Dissipativité locale des systèmes paraboliques pour différent normes. (English summary) [Local dissipativeness of parabolic systems for differential norms] (83b:35074)

Grüter, Michael (with Widman, Kjell-Ove) The Green function for uniformly elliptic equations. (83h:35033)

n, Uwe Hebbarkeit von Singularitäten bezüglich gewichteter Sobolev-Räume [Removability of singularities with respect to weighted Sobolev spaces] (83£35081)

Kurbanov, A. A. Ser Novruzov, A. A., (83£35026)

Munun, Harald Das Dirichlet-Problem in Hölder-Räumen. [The Dirichlet problem in

Hölder spaces) (83k:35049) Muresan, Anton S. Some properties of solutions of equation $\Delta^4 u = 0$. II. (83k:35035) Novruzov, A. A. (with Kurbanov, A. A.) Removable singularity of solutions of

asilinear elliptic equations. (Russian. English and Azerbaijani second-order quasilinear summaries) (83g-35026) man, Kjell-Ove See Grüter, Michael, (83h:35033)

to, Hiromichi On null sets for extremal distances of order p. (834:31003)

31B99 None of the above, but in this section

secondary classifications:

Brown, Leon (with Kahane, Jean-Pierre) A note on the Pompeiu problem for convex domains. (83g:42013)

Chang, Mos Hsiung Equilibrium measure and Brownian escape process. (83g:60068)

Chea, Y. T. The gravitational field inside a long hollow cylinder of finite length. (83a:70004) Kahane, Jean-Pierre See Brown, Leon, (83g:42013)

31Cxx Other generalizations

31C05 Harmonic, subharmonic, superharmonic functions

Fuglede, Bent Sur les fonctions finement holomorphes. (English summary) [Finely

holomorphic functions] 83e:31003

Mask, Hars Harmonische Formen in einer Matrixvariablen. [Harmonic forms in a matrix variable] 83g:31008 strangelo, Michèle Laplacier

strangelo, Michèle Laplacien fin de fonctions à moyenne convexe. (English summary) [Fine Laplacian of functions with a convex mean] 83e:31005

ascisions up., Albert Périodes des fouctions harmoniques bornées. [Periods of bounded harmonic functions] 83k:31068

Berenstein, Carlos A. (with Zalcman, Lawrence) Pompeiu's problem on symmetric spaces. (83d-43012)

Berline, Nicole (with Vergne, Michèle) Équations de Hua et noyau de Poisson. [Hua equations and Poisson kernel] (83k-22019)

Caffarelli, Lais A. (with Fabes, Eugene B.; Mortola, Stefano; Salsa, Sandro) Boundary behavior of nonnegative solutions of elliptic operators in divergence form. (83c-35040)

Fabes, Eugene B. See Caffarelli, Luis A.; et al., (83c-35040)

Gaigalaitè, V. Harmonic and excessive functions of a space-time process. I. (Russian. English and Lithuanian summaries) (83d-60086)

Gassner, Moses (with Nakai, Mitsuru) The roles of acts of nondensity points.

sner, Moses (with Nakai, Mitsuru) The roles of sets of nondensity points.
(836:30047)

lt8,6:3047)
lt8, Masayuki On weakly regular Hunt diffusion kernels. (83):60080)
Divisible convex cones constituted by Hunt convolution kernels. (83):6007
Korinyi, Adam (with Taylor, John Christopher) Fine convergence and admissible convergence for symmetric spaces of rank one. (83):23021
Mortola, Stefano See Caffarelli, Luis A.; et al., (83::35040) els. (83j:60079)

Nakai, Mitsuru (with Sario, Leo) Harmonic functionals on open Riemann surfaces. (834:30047)

(83d-39047)

See also Glasner, Moses, (83b:30047)

Novitskii, M. V. An integral representation of completely excessive elements and completely L-superharmonic functions. (Russian) (83d:35037)

completely L-superharmonic functions. (Russian) (83d-83 Salsa, Sandro See Caffarelli, Luis A.; et al., (83c:35040) Sario, Leo See Nakal, Mitsuru, (83d-30047) Taylor, John Christopher See Korinyi, Adam, (83g:32032) Vergue, Michèle See Berline, Nicole, (83h:22019) Zalcman, Lawrence See Berenstein, Carlos A., (83d-43012)

31C10 Pluriharmonic and plurisubharmonic functions [See also 32F05.]

Fichera, Gaetano Boundary value problems for pluriharmonic functions. (Italian)

secondary classifications:

Bedford, Eric The operator (dd^c)" on complex spaces. (83i:32025)
Bell, Steven R. A Sobolev inequality for pluriharmonic functions. (83i:32011)
Estévez, Margarita (with Hervis, Carlos) Application des mesures gaussiennes complexes aux fonctions plurisousharmoniques et analytiques. (English summary) [Application of complex Gaussian measures to plurisubharmonic and analytic functions] (83c:32025)
Favorov, S. Yu. Sets of removable singularities of plurisubharmonic functions. (Russian)

(83g:32017)

(acquissor);
revis, Carlos See Estévez, Margarita, (83c:32025)
reville, G. Mesures pluriharmoniques et comparaison de deux théories du potentiel au
bord. [Pluriharmonic measures and comparison of two boundary potential theories]

on, Robert E. (with Shiffman, Bernard) Capacity, Tchebycheff con transfinite hyperdiameter on complex projective space. (83k:32004) tonkin, L. I. Generalized Hartogs domains. (Russian) (83e:32002) adullaev, A. Estimates of polynomials on analytic sets. (Russian) (83k:32018) adullaev, S. Extension of pluri-subharmonic functions from a submanifold. (Russian)

(834:32031)

an, Bernard See Molzon, Robert E., (83i:32004)

31C12 Potential theory on Riemannian manifolds [See also 53C20; for Hodge theory, see 58A14.]

Beaver, Bradley (with Sario, Leo; Wang, Cecilia) Spherical harmonics generating bounded biharmonics. 836:31009

mg, Lung Ock (with Sario, Leo; Wang, Cecilia) Quasiharmonic L^p functions on the Poincaré N-ball. 83m:31009

Biharmonic and polyharmonic principal functions. 834:31007
ssner, Moses (with Katz, Richard) Limits of Dirichlet finite functions along curves.
834:31007

Sario, Leo See Beaver, Bradley; et al., 83£31009 and Chung, Lung Ock; et al.,

83m:31009
Wang, Cocilia See Beaver, Bradley; et al., 83i:31009 and Chung, Lung Ock; et al.,

condary classification

Glasner, Moses (with Nakai, Mitsuru) Images of reduction operators. (83c:30045) (with Nakai, Mitsuru) A note on images of reduction operators. (83c:30046) Nakai, Mitsuru See Glasner, Moses, (83c:30045) and (83c:30046)

31C15 Potentials and capacities

Feyel, Denis Une mesure de l'épaisseur d'un ensemble presque borélien. (English summary) [Measurement of the thickness of a nearly Borelian set] 836:31007

Forst, Gunnar Note sur des principes duaux en théorie du potentiel. (English summary) [Note on dual principles in potential theory] 836:31008

Hansen, Wolfhard Semipolar sets and quasibalayage. 83m:31010

Pinnienta, Marie-José Étude d'une classe de topologies intermédiaires sur R'. (English summary) [A class of intermédiaite topologies on R'] 836:31008

secondary classifications:

Albeverlo, Sergio (with Fukushima, Masatoshi; Karwowski, Witold; Streit, Ludwig)
Capacity and quantum mechanical tunneling. (83a:81020)
Attouch, Hédy (with Picard, Colette) Inéquations variationnelles avec obstacles et
espaces fonctionnels en théorie du potentiel. (English summary) [Variational

nequalities with obstacles and function spaces in potential theory] (83k-49013)

ean, N. Théorie du potentiel associée à certains systèmes differentiels. [Potential
theory associated with certain differential systems] (83k-60065)

theory associated with certain differential systems] (83b:60065)
Chung, Kai Lai (with Rao, Murali) Equilibrium and energy. (83b:60102)
Frehse, Jens Capacity methods in the theory of partial differential equations. (83j:25040)
Fulushima, Masatoshi See Albererio, Sergio; et al., (83a:81020)
Gallardo, Léonard Capacitès, mouvement brownien et problème de l'épine de Lebesgue sur les groupes de Lie nilpotents. (English summary) [Capacities, Brownian motion and the problem of the Lebesgue thorn on nilpotent Lie groups] (83m:60103)
Gaveau, Bernard Estimations des mesures plurisousharmoniques et des spectres associés. (English summary) [Estimates of plurisubharmonic measures and the associated spectra] (83c:58074)

Kormonwik Wisheld. See Albererio. Semice et al. (83c:81070)

ski, Witold See Albeverio, Sergio; et al., (83a:81020)

Laville, G. Mesures pluriharmoniques et comparaison de deux théories du potentiel au bord. [Pluriharmonic measures and comparison of two boundary potential theories]

ssuoka, Cho-ichiro Bounded harmonic functions and the Dirichlet problem on the Shilov boundary of $H^{\infty}(W)$. (834:46066)

Maz'ya, V. G. (with Shaposhnikova, T. O.) Multipliers of S. L. Sobolev spaces in a domain. (Russian) (83a:46045a)

(with Shaposhnikova, T. O.) Multipliers in pairs of spaces of potentials. (Russian)

(with Preobrazhenskil, S. P.) Some estimates of (l, p)-capacities and their cation to embedding theorems. (Russian. English and Georgian summaries)

ova, T. O.) Sufficient conditions for belonging to classes of

multipliers. (Russian) (83a:46045c)
Picard, Colette See Attouch, Hédy, (83h:49013)
Preobrazhenskii, S. P. See Maz'ya, V. G., (83h:

Rao, Murali See Chung, Kai Lai, (83:60102)
Sadullaev, A. Plurisubharmonic measures and capacities on complex manifolds. (Russian)

mko, S. G. Generalized Riesz potentials and hypersingular integrals with homogeneous characteristics; their symbols and inversion. (Russian) (83a:45004) aposhnikova, T. O. See Maz'ya, V. G., (83a:46045a); (83a:46045b) and (83a:46045c)

Streit, Ludwig See Albeverio, Sergio; et al., (83a:81020)

31C20 Discrete potential theory and numerical methods

secondary classifications:

Kesavan, H. K. See Savage, G. J., (83b:94047)
Reznik, A. A. Approximation of surface potentials of elliptic operators by difference potentials. (Russian) (83i:35082)

Savage, G. J. (with Kesavan, H. K.) Discrete analogues of Green's identities through the graph-theoretic field model. (83h:94047)

31C25 Dirichlet spaces

Allain, Guy Décomposition des formes de Dirichlet. [Decomposition of Dirichlet forms]

Okada, Masami Espaces de Dirichlet généraux en analyse complexe. [General Dirichlet

spaces in complex analysis] 83k:31009

det, Philippe Espace de Dirichlet en dimension infinie. (English summary)
[Infinite-dimensional Dirichlet space] 83k:31010

Dynkin, E. B. Harmonic functions associated with several Markov processes. (83e:60078)

Dynkin, E. B. Harmomic functions associated with several Markov processes. (83m:6007)
Green's and Dirichlet spaces associated with fine Markov processes. (83m:60097)
Gaveau, Bernard (with Lawrynowicz, Julian) Intégrale de Dirichlet sur une variété
complexe. I. [Dirichlet integral on a complex manifold. I] (83h:32020)
(with Lawrynowicz, Julian) Espaces de Dirichlet invariants biholomorphes et
capacités associées. (English and Russian summaries) [Biholomorphic invariant
Dirichlet spaces and related capacities] (83):23027)
Kussuoka, Shigeo Dirichlet forms and diffusion processes on Banach spaces. (83h:60082)
Lawrynowicz, Julian See Gaveau, Bernard, (83h:32020) and

Le Jan, Yves Dual Markovian semigroups and processes. (83k:60087)
Picard, Colette Nonlinear variational inequalities and nonlinear potential theory.

haropol, Radu Quelques observations sur les L^2 -résolvantes. [Some observations on L^2 -resolvents] (83k:60088)

31C35 Martin boundary theory [See also 60J50.]

Ancona, Alano Régularité d'accès des bouts, et frontière de Martin d'un domaine euclidien. (English summary) [Regularity of attainability of ends and the Martin boundary of a Euclidean domain] 838:31011

31C99 None of the above, but in this section

Laub, Jesper A singular convolution kernel without pseudoperiods. 83i:31010

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Lyons, T. J. Finely holomorphic functions. 83&31009

Reimann, H. M. A rotation invariant differential equation for vector fields. 83&31011

Koval'ov, V. F. (with Mel'nichenko, Î. P.) Biharmonic functions on the biharmonic plane. (Russian. English summary) (83c:30058) Mel'nichenko, İ. P. See Koval'ov, V. F., (83c:30058)

31D05 Axiomatic potential theory

andam, Victor Théorie du potentiel dans un espace harmonique sans potentiel positif.

[Potential theory in a harmonic space without positive potential] 83h:31009

Superharmonic extensions and the flux. (French summary) 83f:31006

umann, Astrid Poisson-Formeln für harmonische Kerne. [Poisson formulas for

ic kernels] 83m:31011

Bertin, E. M. J. Fonctions convexes et théorie du potentiel. I, II. [Convex functions and potential theory. I, II] 83e:31004

Bucur, Gh. See Boboc, N.; et al., \$3631012

Bucur, Gh. See Boboc, N.; et al., \$3631012

Cornea, A. (with Höllein, H.) Morphisms and contractions on standard H-cones.

See also Boboc, N.; et al., 83i:31012

Feyel, Denis (with de la Pradelle, A.) Dualité des quasi-résolvantes de Ray. [Duality of the quasiresolvents of Ray] 83h:31010

Höllein, H. See Cornea, A., 83i:31013

Laine, Ilpo Full-polar sets and full-hyperharmonic structures. 83:31614

Loeh, Peter A. A construction of representing measures for elliptic and parabolic differential equations. 83i:31015

Lukeš, Jaroslav (with Malý, Jan) On the boundary behaviour of the Perron generalized solution. 836:31008

da, Fumi-Yuki Dirichlet problem for a semilinearly perturbed structure of a harmonic space. 83m:31012

Malý, Jan See Lukeš, Jaroslav, 83b:31008 Netuka, Ivan La représentation de la solution généralisée à l'aide des solutions classiques numa, I wan La representation de la solution generatisse à l'aude des solutions classiques du problème de Dirichlet. [The representation of the generalized solution of the Dirichlet problème de Dirichlet generalise pour un compact. [The uniqueness of the generalized Dirichlet problème for a compactum] 83k:31012

a, Kirsti Theorems of the Riesz type for co-fine cluster sets of harmonic morphisms.

Oja, Kirsti 83h:31011

Pirinen, Aulis Absorbent sets and harmonic me de la Pradelle, A. See Feyel, Denis, 83h:31010 ic morphisms. 83e:31006

Vesely, Jiří Sequence solutions of the Dirichlet problem. (Czech summary) 83h:31012

secondary classifications:

Boulesu, N. Espaces biharmoniques et couplage de processus de Markov. [Biharmonic spaces and Markov process coupling] (83c:66105)
Gologan, Radu-Nicolae The maximal ergodic theorem in ø-lattice cones. (83g:47007)
Hirobata, Tetsuya See Morisaka, Hisaski, et al., (83k:31006)
Morinaka, Hisaski (with Hirobata, Tetsuya; Nishimura, Takeshi) On approximation of

harmonic functions in Brelot space. (83h:31006) Nishimura, Takeshi. See Morinaka, Hisashi; et al., (83h:31006)

32-XX SEVERAL COMPLEX VARIABLES AND ANALYTIC SPACES {For infinite-dimensional holomorphy, see also 46G20, 58B12.)

32-01 Elementary exposition, textbooks

Field, Mike J. *Several complex variables and complex manifolds. I. 83e:32001a

*Several complex variables and complex manifolds. II. 83e:32001b

Henkin, G. M. (with Leiterer, Jürgen) *Theory of functions on strictly pseudoconvex acts with nonsmooth boundary. 83e:32001

Leiterer, Jürgen See Henkin, G. M., 83a:32001

secondary classifications:

Forster, Otto *Lectures on Riemann surfaces. (83&30046) (Gilligan, Bruce) See Forster, Otto, (83&30046) Krzyż, Jan (with Lawrynowicz, Julian) *Elementy analizy zespolonej. (Polish) [Elements of complex analysis] (83c:30001)
Lawrynowicz, Julian See Krzyż, Jan, (83c:30001)
Wells, R. O., Jr. ★Differential analysis on complex manifolds. (83f:58001)

32-02 Advanced exposition (research surveys, monographs, etc.)

Fresnel, Jean (with van der Put, Marius) ★Géomètrie analytique rigide et applications. (French) [Rigid analytic geometry and its applications] 83g:32001 van der Put, Marius See Fresnel, Jean, 83g:32001

secondary classifications:

Wells, R. O., Jr. The Cauchy-Riemann equations and differential geometry. (83f:32001)

32-03 Historical (must also be assigned at least one classification number

Wells, R. O., Jr. The Cauchy-Riemann equations and differential geometry. 83f:32001

Nishino, Toshio Prof. Kyoshi Oka's mathematics. (Japanese) (10g/91679) (Oka, Klyoshi) See Nishino, Toshio, (13g/91679)

32-04 Explicit machine computation and programs (not the theory of computation or programming)

32-06 Proceedings, conferences, etc.

(Eells, James) See Complex analysis, #3i:32001 (Lé Dûng Tring) See Seminar: Singularities, #3i:32001 (Lelong, Pierre) See Seminar: Lelong-Skoda (Analysis), #3i:32001 (Skoda, Henri) See Seminar: Lelong-Skoda (Analysis), #3i:32001

ns in Finite or Infinite Dis m *Séminaire Pierre Lelong-Henri Skoda (Analyse), Années 1980/1981, et Colloque de Wir Mai 1981. (French) [Seminar Pierre Lelong-Henri Skoda (Analysis), 1980/1981, and Colloquium at Wimereux, May 1981] 834:32601

plex analysis **Complex analysis 83k:32601

Several Complex Variables See Several complex variables, 83m:32001 riona See Several complex variables, 83m:32001

riant Metrics, Harmonic Vol. XXVI. 83g:32062 nic Maps and Related Questions *Symposia Mathematica.

arities, 83k:32001 Paris See Seminar: Sia e See Symposia Mathematica, 83g:32002

ng-Skoda (Analysis) *Séminaire Pierre Lelong-Henri Skoda (Analyse), Années 1980/1981, et Colloque de Wimereux, Mai 1981. (French) [Seminar Pierre Lelong-Henri Skoda (Analysis), 1980/1981, and Colloquium at Wimereux, May 1981] 834-32001

Singularities 83k:32001 s *Séminaire sur les Singularités. (French) [Seminar on Singularities]

Several complex variables

**Several complex variables. #3m:32001

Summer School:

Complex Analysis *Complex analysis 83i:32001
Symposia Mathematica *Symposia Mathematica. Vol. XXVI. 83g:32002

Topological Analytical Aspects of Singularity Theory

Topological Analytical Aspects of Singularity Theory

See Topological analytical aspects of singularity theory

*Topological analytical aspects of singularity theory

singularity theory. (Japanese) 834:32002

Trieste See Complex analysis, 83:32001

Wimereux See Seminar: Lelong-Skoda (Analysis), 834:32001

secondary classifications:

(Tutschke, Wolfgang) See Complex analysis and its application to partial different equations, (83h:30001a) and (83h:30001b)
(Vladimirov, V. S.) See Generalized functions and their applications in mathemati

physics, (83k:46004)

uplex analysis and its application to partial differential equations *Komplexe Analysis und ihre Armendung auf partielle Differentialgleichungen. Teile 1-3. (German) [Complex analysis and its application to partial differential equations. Parts 1-3]

★Komplexe Analysis und ihre Anwendung auf partielle Differentialgleichungen. Teil 4. (German) [Complex analysis and its application to partial differential equations. Part 4] (831:26061b)

derenne:

Complex Analysis and its Application to Partial Differential Equations ★Komplexe

Analysis und ihre Anwendung auf partielle Differentialgleichungen. Teile 1-3.

(German) [Complex analysis and its application to partial differential equations.

Parts 1-3] (83h:30001a)

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Lieb, Elliott H. (with Sokal, Alan D.) A general Lee-Yang theorem for one-component

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Kato, Mitsuo An estimate of the roots of b-functions by Newton polyhedra. (83i:32016)
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Morrow, James A. (with Rossi, H.) Some general results on equivalence of embeddings. (83g:32006)

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Saito, Morihiko Gauss-Manin system and mixed Hodge structure. (83f:14006)
Wall, C. T. C. Affine cubic functions. IV. Functions on C³, nonsingular at infinity.

32C42 Stratified sets, etc. [See also 32Bxx.]

Bescheron-Lebrigand, Dominique Sur certaines singularités non isolées. (English summary) [On some nonisolated singularities] 83c:32019

Brasselet, J.-P. (with Schwartz, M.-H.) Sur les classes de Chern d'un ensemble analytique

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Caracteristique d'Euler-Poincaré d'Caracteristique d'Euler-Poincaré. (French) [The Euler-Poincaré characteristic] (83c:14015)

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32C45 Modifications, resolution of singularities [See also 14E15.]

Brylinski, Jean-Lue (with Dubson, Alberto S.; Kashiwara, Masaki) Formule de l'indice pour modules holonomes et obstruction d'Euler locale. (English summary) [Index formula for holonomic sheaves of modules and local Euler obstruction] 83a:32010

Dubson, Alberto S. See Brylinski, Jean-Luc; et al., 83a:32010

Fernández Bermejo, Emiliano Immersion types of a singular diagram. (Spanish)

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Ohnawa, Takeo On analytic families of submanifolds and holomorphical convexity of neighbourhoods of P¹. 83j-32015

Sabbah, Claude Morphismes analytiques stratifiés sans éclatement et cycles évanescents.

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Kso, Tree Char (with Ward, J. N.) A theorem on almost analytic equisingularity.

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32Dxx Analytic continuation

32D05 Domains of holomorphy

va, O. Yu. Description of bicircular domains of bounded holomorphy. (Russian) K35-32010

Jamicki, Marek On some Fréchet spaces of analytic functions. 83k:32024

Moraes, Luiza A. Theorems of the Cartan-Thullen type and θ-envelope of holomorphy

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Ballico, Edoardo On Cousin-I-complex spaces. (83):320200 Bros, J. Scattering in quantum field theory: the M.P.S.A. approach in complex momentum space. (83m:81052)

Putinar, Mihai The superposition property for Taylor's functional calculus. (83f:47015)
Sholkowski, Zhigniew Analytic families of operators: variation of the spectrum.
(83f:47004)

32D10 Envelopes of holomorphy

Bedford, Eric Stability of envelopes of holomorphy and the degenerate Monge-Ampère tion. 83h:32013

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Ivashkovich, S. M. Envelopes of holomorphy of some tubular sets in C² and a monodromy theorem. (Russian) 838:32025

Construction d'envelopes d'holomorphie par la méth

Vigué, Jean-Pierre Construction d'enveloppes d'holomorphie par la méthode de H. Cartan et P. Thullen. [Construction of envelopes of holomorphy by the method of H. Cartan and P. Thullen] 83i:32021

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Novitskii, M. V. Envelope of holomorphy of a class of real-analytic functions. (Russian)

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complex variables. (83c:32021) Sugawara, Noriko See Kajiwara, Joji, (83e:32005)

32D15 Continuation of analytic objects

Bell, Steven R. Analytic hypoellipticity of the \(\tilde{\theta}\)-Neumann problem and extendability of holomorphic mappings. 83s:32011

Clma, Joseph A. (with Globevnik, Josip) Analytic continuation on complex lines.

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 Ehrenpreis, Leon The edge-of-the-wedge theorem for partial differential equations.

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Barrett, David E. Regularity of the Bergman projection on domains with transverse symmetries. (83i:32032)

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Persson, Jan On the analytic continuation of holomorphic solutions of partial differential equations. (83i:35030)

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Runkin, L. I. Continuation with estimates of functions that are holomorphic on the set of zeros of a polynomial. (Russian) (83i:32005)

Troy, Daniel J. Polynomially bounded multisequences and analytic continuation. (83b:32001)

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32D20 Removable singularities

Dini, Gilberto (with Parrini, Carla) Extending CR-distributions. (French summary)

Favorov, S. Yu. Sets of removable singularities of plurisubharmonic functions. (Russian) 83e:32017

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Chirka, E. M. Regularity of the b oundaries of analytic sets. (Russian) (83f:32009) Dini, Gilberto (with Parrini, Carla) Removable singularities of CR-distributions on flat domains. (Italian. English summary) (83s:32016)

Parrini, Carla See Dini, Gilberto, (83s:32016)

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32D25 Non-Archimedean function theory

32D99 None of the above, but in this section

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Webster, S. M. Holomorphic mappings of domains with generic corners. (83k:32041)

32Exx Holomorphic convexity

32E05 Holomorphically convex complex spaces, reduction theory

Diederich, Klas (with Ohsawa, Takeo) A Levi problem on two-dimensional complex

Floris, Ruhal On the notion of holomorphic convexity. (Italian. English summary) 83::32022

Nguyen Thanh Van Sur les bases polynomiales semi-simples de l'espace H(K). [On the semisimple polynomial bases of the space H(K)] 83g:32018 Ohsawa, Takeo See Diederich, Klas, 83m:32017

secondary classifications:

Diederich, Klas (with Pflug, Peter) Über Gebiete mit vollständiger Kählermetrik. [On domains with a complete Kähler metric] (834:32018)

Jamicka, Maria A note on polynomially convex open sets in C". (Polish summary)

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32E10 Stein spaces, Stein manifolds

Ballico, Edoardo On Cousin-I-complex spaces. 83j:32020

Bänicä, C. (with Forster, Otto) Complete intersections in Stein manifolds. 83j:32021 Diederich, Klas (with Pflug, Peter) Über Gebiete mit vollständiger Kählermetrik. [On domains with a complete Kähler metric] 83d:32018

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nabe, Kiyoshi Coverings of a projective algebraic manifold. 83b:32011

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Greene, R. E. Function theory of noncompact Kähler manifolds of nonpositive curvature. (83::53089)

Kajiwara, Joji (with Sugawara, Noriko) Quotient representation of meromorphic functions in a domain over a product space of Grassmann manifolds. (83c:32005)

Kasue, Atsushi On Riemannian manifolds with a pole. (83f:33030)

Putinar, Mihai The superposition property for Taylor's functional calculus. (83f:47015)

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32E20 Polynomial convexity

Jarnicka, Maria A note on polynomially convex open sets in C". (Polish summary) 83j:32022

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32E25 Algebras of holomorphic functions [See also 30H05, 46J10, 46J15,]

champ, Th. (with Stout, Edgar Lee) Maximum modulus sets. (French summary) R34-32619

Formess, John Erik (with Henriksen, Berit Stensønes) Characterization of global peak sets for Acc(D), 83k:32027

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nbo, Toshiya Peak interpolation sets for some uniform algebras. 83e:32013

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ni, Olympia Homomorphisms of algebras of germs of holomorphic functions. 83c:32023

Ochiai, Hiroji (with Yanagihara, Niro) Maximal ideals in the algebra of holomorphic functions. 83a:32013

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Uluçay, Cengiz Characterization of n-dimensional complex manifolds. (Turkish summary) 83i:32022a

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secondary classifications:

Cole, Brian J. (with Gamelin, T. W.) Tight uniform algebras and algebras of analytic functions. (83h:46065)

Darko, Patrick W. A note on generators of the maximal ideals of $H^{\infty}(\Omega)$ on

polycylinders. (83k:32026)
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**mans, Arnold **Das analytische Tensorprodukt. (German) [The analytic tensor product] (83a:12034)

ilios, Anastasios Principal holomorphic fiber bundles as applied to topological algebras. (83c:46046) Mall

Rickart, Charles E. *Natural function algebras of holomorphic functions. (83b:46069)

Schottenloher, Martin Michael problem and algebras of holomorphic functions. (83b:46061)

rbina, N. V. The Levi form for C1 smooth hypersurfaces and the complex structure of the boundary of domains of holomorphy. (Russian) (83k:32029)

Verdera, Joan Finitely generated projective extensions of uniform algebras. (83h:46064)

32E27 Krasner-Tate algebras, etc. (algebras of holomorphic functions over non-Archimedean fields)

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Bartenwerfer, Wolfgang Die strengen metrischen Kohomologiegruppen des Einheitspolyzylinders verschwinden. [The strict metric cohomology groups of the unit

himann, Friedhelm Ein Beweis für einen Satz von Raynaud über flache
Homomorphismen affinoider Algebren. [A proof for a theorem of Raynaud on flat
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van der Put, M. Cohomology on affinoid spaces. (83g:32014)

32E30 Holomorphic and polynomial approximation

Droste, Bernd Holomorphic approximation of ultradifferentiable functions. 83e:32015 Globevnik, Josip Norm preserving interpolation sets for polydisc algebras. 83/s32015
Kasten, Volker (with Schmieder, Gerald) Zur Approximation and dünnen Mengen im C².
[On approximation on thin sets in C²] 83s:32014
Lutterodt, Clement H. On uniform convergence for (μ, ν)-type rational approximants in C².

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Nikić, M. Rational sheaves over domains from C". (Serbo-Croatian. Russian summary) 83c:32024

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Henriksen, Berit Stensones A peak set of Hausdorff dimension 2n-i for the algebra A([⊕]) in the boundary of a domain [⊕] with C[∞]-boundary in C[∞]. (83k:32028)
 Jimbo, Toshiya Peak interpolation sets for some uniform algebras. (83e:32013)
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32E35 Global boundary behavior of holomorphic functions

de Bartolomeis, Paolo On the trace of analytic sets. (Italian. English summary) 834:53034 Callin, David Boundary behavior of holomorphic functions on pseudoconvex domains. 83b:32013

Chaumat, Jacques (with Chollet, Anne-Marie) Ensembles pics pour $A^{\infty}(D)$ non globalement inclus dans une variété intégrale. [Peak sets for $A^{\infty}(D)$ not globally included in an integral manifold] 836:32016 Chollet, Anne-Marie See Chaumat, Jacques, 834:32016

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32Fxx Geometric convexity

32F05 Plurisubharmonic functions and generalizations [See also 31C10.]

Arhari, Abdelhak Nombre-densité des fonctions plurisousharmoniques relativement aux mesures gaussiennes. (English summary) [Density number of plurisubharmonic functions with respect to Gaussian measures | 83m:32021

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Diederich, Klas (with Fornæss, John Erik) Smooth, but not complex-analytic pluripolar sets. 83e:32017

Dineen, Séan (with Noverraz, Philippe) Gaussian measures and polar sets in locally convex spaces. 83b:32014

Estèvez, Margarita (with Hervès, Carlos) Application des mesures gaussiennes complexes aux fonctions plurisousharmoniques et analytiques. (English summary) [Application of complex Gaussian measures to plurisubharmonic and analytic functions] 83e:32025 complex Gaussian measures to plurisubharmonic and analytic functions] 83e:32025
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an, Christer O. Stabilité du nombre de Lelong par restriction à une sous-variété. (Esperanto summary) [Stability of the Lelong number under restriction to a subvariety] 83j-32024

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Siciale, Józef Extremal plurisubharmonic functions in Co. 83e:32018

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(Cœuré, Gérard) See Cherfaoui, N., (83f:46051)

Favorov, S. Yu. Sets of removable singularities of plurisubharmonic functions. (Russian)

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Boundary value problems for pluriharmonic functions. (Italian) (83i-31008)

Gaveau, Bernard Estimations des mesures plurisousharmoniques et des spectres associés.

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ng, Pierre Calcul du nombre densité v(x,f) et lemme de Schwarz pour les fonctions plurisousharmoniques dans un espace vectoriel topologique. [Calculation of the density number $\nu(x,f)$ and Schwarz's lemma for plurisubharmonic functions in a logical vector space] (83j:46056)

Okada, Masami Espaces de Dirichlet généraux en analyse complexe. [General Dirichlet

spaces in complex analysis] (83k:31009) Ouyang, Cai Heng The operator $\Delta_K^2 + n^2 T^2$ and pluriharmonic functions on the Heisenberg group. (Chinese. English summary) (83i:35051)

32F10 q-convexity, q-concavity

na, Takeo A reduction theorem for cohomology groups of very strongly q-convex Kähler manifolds. 83a:32015

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Buchner, Micha el (with Fritzsche, Klaus) On the dimension of analytic cohomology. (83j:32007)

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Michel, Joackim *Integralformeln in der komplexen Analysis. (German) [Integral formulas in complex analysis] (835:33006)
Shiffman, Bernard See Kalka, Morris; et al., (83j:33029)
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32F15 Pseudoconvex domains

Diederich, Klas (with Forness, John Erik) A smooth pseudoconvex domain witho pseudoconvex exhaustion. 83m:33022

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Jewell, Nicholas P. Fredholm Toeplitz operators on strongly pseudoconvex domain

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ntou, Nancy K. The heat equation for the $\hat{\partial}$ -Neumann problem in a strictly pseudoconvex Siegel domain. 83e:32027

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Bell, Steven R. (with Catlin, David) Proper holomorphic mappings extend smoothly to the boundary. (834:32024)

The Bergman kernel function and proper holomorphic mappings. (83:53003)

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Maire, H.-M. Régularité optimale des solutions de systèmes différentiels et du Laplacien associé; application au □_b. [Optimal regularity of solutions of differential systems and of the related Laplacian; application to □_b] (83e:35027)

Stout, Edgar Lee Interpolation manifolds. (83e:32014)

Varopoulos, Nicholas Th. Sur les zéros des classes de Hardy H^p(Ω). (English summary)

[On the zeros of the Hardy classes $H^p(\Omega)$] (83k:32010)

32F20 Geometric results on 3-Neumann problems [See also 35N15.]

de Bartolomeis, Paolo Le deuxième problème de Cousin avec condition au bord. (English summary) [The second Cousin problèm with a condition at the boundary] 83e:32019
Boggess, Al Levi geometry and the tangential Cauchy-Riemann equations on a real analytic submanifold of C". 83i:32028

Lascar, Bernard Solutions faibles et solutions fortes du problème $\partial u = f$ où f est une fonction à croissance polynomiale sur un espace de Hilbert. [Weak solutions and strong solutions of the problem of $\bar{\partial}u=f$ where f is a function with polynomial growth on a Hilbert space] 83c:32029

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rgeev, A. G. Integral representations and estimates for the $\bar{\delta}$ equation in pseudoconvex polyhedra. (Russian) (See 83k:46004) anton, Nancy K. The solution of the $\bar{\delta}$ -Neumann problem in a strictly pseudoconvex

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Andreotti, Aldo (with Nacinovich, Mauro) Noncharacteristic hypersurfaces for complexes of differential operators. (Italian summary) (83e:58079) (with Fredricks, Gregory A.; Nacinovich, Mauro) Differential equations without

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Bell, Steven R. Analytic hypoellipticity of the 8-Neumann problem and extendability of holomorphic mappings. (83e:32011)

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32H99 None of the above, but in this section

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32Jxx Compact analytic spaces (For Riemann surfaces, see 14Hxx, 30Fxx.)

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Tokumaga, Shoshi A condition for holomorphic maps of \mathbb{C}^2 into \mathbb{C}^2 to be algebraic. (83hs32003)

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Catenacci, Roberto (with Reina, Cesare) Einstein-Kähler surfaces and gravitational instantons. (83d:83024)

Kawamata, Yujiro Characterization of abelian varieties. (83):14029)
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32J20 Algebraicity criteria

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Hefez, Abramo On periodic meromorphic functions on Cⁿ. (Italian summary) (83c:32033)

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32J99 None of the above, but in this section

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32Kxx Generalizations of analytic spaces (should also be assigned at least one other classification number in this section)

32K05 Banach analytic spaces [See also 58Bxx.]

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Kaup, Wilhelm Über die Klassifikation der symmetrischen hermites

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Hamming, Antonia Zum Satz von Siu in der nichtarchimedischen Funktionentheorie. [On Siu's theorem in non-Archimedian function theory] (83m:32018) van der Put, M. Cohomology on affinoid spaces. (83g:32014)

32K15 Differentiable functions on analytic spaces, differentiable spaces [See also 58C25.]

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32Lxx Holomorphic fiber spaces [See also 55Rxx.]

32L05 Holomorphic fiber bundles and generalizations

Elencwajg, Georges The Brauer groups in complex geometry. 83k:32042 Skoda, Henri Morphisme surjectif de fibrés vectoriels semi-positifs. [Surjective morphism of semipositive vector bundles] 83d:32026

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Relations entre les différentes notions de fibrés et de courants positifs. [Relations between the different notions of positive vector bundles and currents] (83j:32032)

Hurder, Steven E. Independent rigid secondary classes for holomorphic foliations. (83h:57036)

Lübke, Martin Chernklassen von Hermite-Einstein-Vektorbündeln. [Chern classes of Hermite-Einstein vector bundles] (83m:32031)

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Mok, Ngaiming The Serre problem on Riemann surfaces. (83f:32014)
Penrose, Roger Quasilocal mass and angular momentum in general relativity. (83j:83024)
Ramanan, S. Orthogonal and spin bundles over hyperelliptic curves. (83f:14014)
Reina, Cesare Ser Catenacci, Roberto, (83g:81062)
Skornyakov, I. A. Generalized Atiyah-Ward bundles. (Russian) (83k:53055)
Soberon, Socorro Vector bundles and the Yang-Mills equations in algebraic geometry. (836:14015)

32L10 Sheaves and cohomology of sections of holomorphic vector bundles, general results [See also 18F20, 55N30.]

Gindikin, S. G. (with Khenkin, G. M.) The Penrose transform and complex integral geometry. (Russian) 83a:32027
 Khenkin, G. M. Yang-Mills-Higgs fields as holomorphic vector bundles. (Russian)

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Murakami, Shingo A note on cohomology groups of holomorphic line bundles over a complex torus. 83i:32038

Rabinowitz, Joshua H. Positivity notions for coherent sheaves over compact complex spaces. 83h:32029a

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 Manin, Yu. I. Gauge fields and holomorphic geometry. (Russian) (83a:32009)
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32L15 Bundle convexity [See also 32F10.]

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32L20 Vanishing theorems

Abdelkader, Osama Un théorème d'approximation pour les formes à valeurs dans un fibré semi-positif. (English summary) [An approximation theorem for forms with values in a semipositive bundle] 83£32039a

Généralisation d'un théorème de finitude. (English summary) [Generalization of a

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Siu, Yum Tong Complex-analyticity of harmonic maps, vanishing and Lefschetz theorems. (83j:58039)

Wells, R. O., Jr. The conformally invariant Laplacian and the instanton vanishing theorem. (83h:32032)

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rder, Steven E. Independent rigid secondary classes for holomorphic foliations.

(83h:57036) Kobayashi, Shoshichi Curvature and stability of vector bundles. (83i:53090)

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32Mxx Complex spaces with a group of automorphisms

32M05 Complex Lie groups, automorphism groups of complex spaces [See

na, Akio On the equivalence problem for a certain class of generalized Siegel ins. III. 83m: 32035

Stachó, L. L. On fixed points of holomorphic automorphisms. 83k32027 A projection principle concerning biholomorphic automorphisms. 83j:32034

Greene, R. E. (with Krantz, Steven G.) Stability properties of the Bergman kernel and curvature properties of bounded domains. (836:32023)

Holmann, Harahl Holomorphe Transformationsgruppen mit kompakten Bahnen.

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Shabet, G. B. Criterion for the biholomorphic equivalence to a ball of a contractible bounded domain. (Russian) (83m:32030)

Steinslek, Manfred Transformation groups on homogeneous-rational manifolds. (83k-32045)

Terada, Toshiski Quelques propriétés géométriques du domaine de F_1 et le groupe de tresses colorées. [Some geometric properties of the domain of F_1 and the group of colored braids] (83b:32008)

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32M10 Homogeneous complex manifolds [See also 14M17, 57T15.]

Akhiezer, D. N. Invariant meromorphic functions on complex semisimple Lie groups.

Huckleberry, A. T. (with Snow, Dennis M.) A classification of strictly pseudoconcave homogeneous manifolds. 83k:32644

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Urakawa, Hajime Complex Laplacians on compact complex homogeneous spaces. 83&32028

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secondary classifications:

Coburn, Lewis A. The Koecher norm and Toeplitz operators in several variables.
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Malyshev, F. M. Compact complex homogeneous spaces with a finite fundamental group.
(Russian. English summary) (83k:53071)

Matsuki, Toshihiko Orbits on affine symmetric spaces under the action of parabolic

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Paneitz, Stephen M. Invariant convex cones and causality in semisimple Lie algebras and groups. (83k:22029)

Satake, I. Special values of zeta functions associated with self-dual homogeneous cones.

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32M15 Hermitian symmetric spaces, bounded symmetric domains [See also 22E10, 22E40, 53C35, 57T15.]

wskli, M. L. Conditions of holomorphy in symmetric domains. (Russian) 83±32029

D'Atri, J. E. Erratum to: "Holomorphic sectional curvatures of bo s and related questions" [Trans. Amer. Math. Soc. 256 (1979), 405-413; MR 81b:320191. 83q:32031

Goncharov, A. B. Infinite al structures that are connected with Hermitian symmetric spaces. (Russian) 83k:32046

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Kolaski, Clinton J. Isometries of Bergman spaces over bounded Runge domains.
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Korányi, Adam (with Taylor, John Christopher) Fine convergence and admissible

convergence for symmetric spaces of rank one. 83g:32032

Kubota, Yoshihisa An extremal problem on the classical Cartan domains. 83h:32031

Lassalle, Michel Transformées de Poisson, algèbres de Jordan et équations de Hua.

(English summary) [Poisson transforms, Jordan algebras and Hua equations]

Murakami, Shingo Certain cohomology groups attached to Hermitian symmetric spaces and unitary representations. 82e:32034

Parthasarathy, Rajagopalan Holomorphic forms in \(\Gamma/G/K\) and Chern classes. 83b:32029

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Wells, R. O., Jr. The conformally invariant Laplacian and the instanton vanishing

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Chen, Su Shing Duality condition and property (S). (83m:53072)

Cygan, Jacek A tangential convergence for bounded harmonic functions on a rank one

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D'Atri, J. E. Sectional curvatures and quasisymmetric domains. (83e:53063)
Elchenberr, Harald (with Forger, Michael) More about nonlinear sigma models on symmetric spaces. (83h:81043)
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Gentill, Graziano Differential geometry of light-cones. (Italian summary) (83e:17016)
Hua, Luo Geng Causality and the Lorentz group. (83h:83004)
Johnson, Kenneth D. On a ring of invariant polynomials on a Hermitian symmetric space. (83c:22019)

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Kramer, Peter (with Saraceno, M.) Semicoherent states and the group ISp(2, R). (See 83uc81001)

Leung, D. S. P. Reflective submanifolds. IV. Classification of real forms of Hermitian

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Nakajima, Kazufumi (with Se-ashi, Yutaka) On totally geodesic Hermitian symmetric submanifolds of Kähler manifolds. (83k:53086)

Ogine, Koichi (with Takagi, Ryoichi) A geometric meaning of the rank of Hermitian symmetric spaces. (83a:53049)

Of shanskii, G. I. Convex cones in symmetric Lie algebras, Lie semigroups and invariant causal structures (orderings) on pseudo-Riemannian symmetric spaces. (Russian) (R3m:53074)

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Se-ashi, Yutaka See Nakajima, Kazufumi, (83a:53086)
Takagi, Ryoichi See Ogine, Koichi, (83a:53049)
Timoney, Richard M. Bloch functions in several complex variables. II. (83b:32005)
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ong, Jia Qing Dimensions of the ring of invariant operators on bounded homogeneous domains. (Chinese. English summary) (83b:43013)

32M99 None of the above, but in this section

Snow, Dennis M. Reductive group actions on Stein spaces. 83f:32026

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Jurkiewicz, Jerzy On the complex projective torus embedding, the associated variety with corners and Morse functions. (Russian summary) (83g:14025)
Rothaus, O. S. Siegel domains and representations of Jordan algebras. (83m:17012)

32Nxx Automorphic functions [See also 10Dxx, 20H10, 22E40, 30F35.1

32N05 General theory of automorphic functions of several complex

secondary classifications:

Baily, Walter L., Jr. Theorems on the finite generation of algebras of modular forms. (83i:10035)

Karel, Martin L. Transformation theory of Eisenstein series. (83i:10036) Kita, Michitake (with Noumi, Masatoshi) On the structure of cohomology gr

attached to the integral of certain many-valued analytic functions. (83g:32013)

Murakami, Shingo A note on cohomology groups of holomorphic line bundles over a complex torus. (83i:32038)

Certain cohomology groups attached to Hermitian symmetric spaces and unitary representations. (83e:32034)

i, Masatoshi See Kita, Michitake, (83g:32013)

Oda, Takayuki A note on the Albanese variety of an arithmetic quotient of the complex hyperball. (83j:14035)

Sibner, Robert J. Remarks on the geometry of the Siegel modular group. (83e:32035)

32N10 Automorphic forms

Harris, Michael Maass operators and Eisenstein series. 83h:32031

secondary classifications:

Maab, Hans Harmonische Formen in einer Matrixvariablen. [Harmonic forms in a matrix variable] (83g:31008)

Resnikoff, H. L. See Tai, Y.-S., (83h:10064)

Tai, Y.-S. (with Resnikoff, H. L.) On the structure of a graded ring of automorphic forms on the 2-dimensional complex ball. II. (83h:10064)

32N15 Automorphic functions in symmetric domains

secondary classifications:

Hattori, Shuzo See Yoshida, Masaaki, (834:35005c)
Johnson, Francis E. A. Locally symmetric homology spheres and an application of Matsushima's formula. (83::57036)

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hida, Masaaki (with Hattori, Shuzo) Local theory of Fuchsian systems with certain discrete monodromy groups. III. (83d:35005c)

Zeltinger, Hanns *Spitzenanzahlen und Volumina Picardscher Modulvarietäten.

(German) [Numbers of cusps and volumes of Picard modular varieties] (83e:10037)

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secondary classifications

Rohlfs, Jürgen The Lefschetz number of an involution on the space of classes of positive definite quadratic forms. (83a:10037)

Williams, Floyd L. Remarks on the unitary representations appearing in the Matsushima-Murakami formula. (83e:22017)

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33-XX SPECIAL FUNCTIONS (33-XX deals with the properties of functions as functions. General systems of orthogonal functions are treated in 42C05. Expansions in orthogonal functions are treated in 42C10, 42C15.)

33-01 Elementary exposition, textbooks

(Gradshtein, I. S.) See van Haeringen, H.; et al., 83j:33001
van Haeringen, H. (with Kok, L. P.) Table errata: Table of integrals, series, and products
[corrected and enlarged edition, Academic Press, New York, 1980; MR 81g:33001] by
I. S. Gradshteyn [I. S. Gradshtein] and I. M. Ryzhik. 83j:33001

I. S. Grausnteyn [I. S. Gradshtein] and I. M. Ryzhik. 83j:33001

Knik, I. P. See van Haeringen, H., 83j:33001

(Ryzhik, I. M.) See van Haeringen, H.; et al., 83j:33001

★Special functions of mathematical physics and chemistry.

83a:33001

33-02 Advanced exposition (research surveys, monographs, etc.)

secondary classifications:

Kashyap, B. R. K. See Srivastava, Hari M., (83m:66129)
Segal, Sanford L. ★Nine introductions in complex analysis. (83h:30001)
Srivastava, Hari M. (with Kashyap, B. R. K.) ★Special functions in queuing theory and related stochastic processes. (83m:60129)

33-03 Historical (must also be assigned at least one classification number from Section 01)

secondary classifications:

Ross, Bertram The early development of the gamma function. (83h:01038)

33-04 Explicit machine computation and programs (not the theory of computation or programming)

Conde, Salvador See Kalla, Shyam L.; et al., (83a:33005)
Kalla, Shyam L. (with Conde, Salvador; Luke, Yudell L.) Integrals of Jacobi functions.

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33-06 Proceedings, conferences, etc.

secondary classifications:

(de Bruin, Marcel G.)—See Padé approximation and its applications, (83b:30003) (van Rossum, Herman) See Padé approximation and its applications, (83b:30003) Amsterdam See Padé approximation and its applications, (83b:30003)

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33A10 Exponential and trigonometric functions

Askey, Richard Two integrals of Ramanujan. 83g:33001 Das, R. N. On certain polynomials. 83m:33001

secondary classifications:

Chendel, R. C. (with Dwivedi, B. N.) A note on some generating functions for certain class of polynomials. (Hindi. English summary) (83m:33018)
Dwivedi, B. N. See Chendel, R. C., (83m:33018)
Gupta, H. L. Some theorems on convolution transform involving generalized Bateman function. (Hindi. English summary) (83h:44013)

Nulton, James D. (with Stolarsky, Kenneth B.) The first sign change of a cosine polynomial. (83h:42002) Stolarsky, Kenneth B. See Nulton, James D., (83h:42002)

33A15 Gamma and beta functions

Al-Salam, W. A. (with Verma, Arun) Some remarks on q-beta integral. 83h:33001 Evans, Ronald J. (with Ismail, Mourad E. H.; Stanton, Dennis) Coefficients in expansions of certain rational functions. 83k:33001

Ismail, Mourad E. H. See Evans, Ronald J.; et al., 83k:33001

van de Lune, J. (with Voorhoeve, M.) *On the values of a function related to Euler's

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gamma function. S3m:33002

Marichev, O. I. (with Vu Kim Tuan) Some properties of the q-gamma-function $\Gamma_q(z)$. (Russian. English summary) 83k:33002

Murray, Francis J. Formulas for factorial N. 83j:33002

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Amice, Yvette Fonction Γ p-adique associée à un caractère de Dirichlet. [p-adic Γ function associated with a Dirichlet character] (80f:12012)
Askey, Richard Two integrals of Ramanujan. (83g-33001)
Batola, François Une généralisation d'une formule d'Erdelyi-Tricomi. [Generalization of an Erdelyi-Tricomi formula] (83m:33005)
Belevitch, Vitold (with Boersma, J.) On Stieltjes integral transforms involving.

Γ-functions. (83d-44001) ersma, J. See Belevitch, Vitold, (83d-44001)

Boersma, J. See Belevitch, Vitola, (83d-46091)

Cansou-Noguès, Pierrette Applications arithmétiques de l'étude des valeurs aux entiers négatifs des séries de Dirichlet associées à un polynôme. (English summary)

[Arithmetic applications of the study of the values at negative integers of Dirichlet series associated with a polynomial] (83e-13011)

Németh, Géza (with Zimányi, Magda) Polynomial type Padé approximants. (83e-41620)

Sivazlian, B. D. On a multivariate extension of the gamma and beta distributions. (83e-82112)

Tesume, N. M. The uniform asymptotic expansion of a class of integrals related to cumulative distribution functions. (83e:41036)

Zimányi, Magda See Németh, Géza, (83e:41020)

33A20 Error function, probability integral

33A25 Elliptic functions and integrals

Chia, T. T. On a simple unified method of deriving recurrence relations among elliptic integrals. 83m:33003

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nko, V. A. Recurrence relations for coefficients of a modular curve. (Russian) R3=33002

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Wilsdon, C. E. An approximate method for evaluating the ratio of two complete elliptic integrals of the first kind. 83j:33003

Wrigge, Staffan A note on the Taylor series expansion coefficients of the Jacobian elliptic function sn(x, k). 83a:33004

Dutka, Jacques Two results of Ramanujan. (\$3a:05016)

Eichler, M. (with Zagier, Don) On the zeros of the Weierstrass p-function. (\$3e:10031)

Feinsilver, Philip J. Commutators, anti-commutators and Eulerian calculus. (\$26:39066)

Fenton, J. D. (with Gardiner-Garden, R. S.) Rapidly-convergent methods for evaluating clliptic integrals and theta and elliptic functions. (\$3k:65017)

Ferrari, E. Generalized trigonometric functions as a new approach to elliptic functions. (Italian summary) (80g:30032)

Gardiner-Garden, R. S. See Fenton, J. D., (83k:65017)

Gladwell, G. M. L. A note on a three-part contact problem, Chebyshev polynomials and

elliptic integrals. (83g/73084)
Itatsu, Setichi Differentiability of Riemann's function. (83e/42006)
de Leew, Simon W. See Perram, John W., (83h:82004)
Marichev, O. I. (with Vu Kim Tuan) Some properties of the φ-gamma-function Γ_q(x).
(Russian. English summary) (83h:83002)
Meyer zur Capellen, W. Die Scheitelkurve sphärischer Thalesellipsen. [The vertex curve

Meyer zur Capenen, W. Die Scheiterure spharischer I manschipsen. [Inte vertex curve of spherical Thales ellipses] (83m:51005)

Perram, John W. (with de Leeuw, Simon W.) Statistical mechanics of two-dimensional Coulomb systems. I. Lattice sums and simulation methodology. (83h:82094)

Vu Kim Tuan See Marichev, O. I., (83h:33002)

Zagier, Don See Eichler, M., (83e:10031)

33A30 Simple hypergeometric functions of one and several variables

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Andrews, George E. Mordell integrals and Ramanujan's "lost" notebook. #3m:33004 Arya, J. P. See Joshi, C. M., #3a:33007 and #3d:33002

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(with Srivastava, Hari M.) Series identities and reducibility of Kampé de Fériet functions. 836:33001

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34C29 Averaging method [See also 47H10.]

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Filar, Maria (with Musialek, Jan) On a certain limit problem for parabolic equation.

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Isakov, V. M. A class of inverse problems for parabolic equations. (Russian) (83e35156)

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35K22 Evolution equations (any order in the spatial derivatives) [See also 58D25.1

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Vrable, Ioan I. An existence result for a class of nonlinear evolution equations in Banach

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 Filar, Maria (with Musialek, Jan) On a certain limit problem for the n-caloric equation

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35L85 Unilateral problems; variational inequalities [See also 35R35, 49A29.1

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Aubin, Jeun-Pierre Variational principles for differential equations of elliptic, parabolic and hyperbolic type. (83g-99004)

Citrini, Claudio The vibrating string with pointshaped obstacle. (83c:73029b)

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Bakhvalov, N. S. On the sound velocity in mixtures. (Russian) (83h:76041)

Belotserkovskil, O. M. (with Grudnitskil, V. G.) Investigation of transient gas flows with a complex internal structure by methods of integral relations. (Russian) (83h:76060)

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35M05 Equations and systems of mixed (Tricomi, etc.) or composite type {For degenerate types, elliptic, see 35Jxx, parabolic, see 35Kxx, hyperbolic, see 35Lxx, etc.}

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et, Gérard Sur la recherche des solutions périodiques en x du systèr

Let $u_x = f(x, y, u, v)$, $u(0, y) = \tau(y)$, $v_y - (\Lambda(x)/y)v = g(x, y, u, v)$, v(x, 0) = 0. (English summary) [The study of periodic solutions in x of the system $u_x = f(x, y, u, v)$, $u(0, y) = \tau(y)$, $v_y - (\Lambda(x)/y)v = g(x, y, u, v)$, v(x, 0) = 0] (83d:35009) [Pustin, N. Yu. Estimates for the solution of the Tricomi problem for a system of equations of parabolic-hyperbolic type. (Russian) (83k:65095)

mykova, S. K. A boundary value problem with shift for a hyperbolic equa degenerate inside the domain. (83e:35079)
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Rassias, John Michael S. The bi-hyperbolic degenerate boundary value problem in R³. (83a:35067)

A new bi-hyperbolic boundary value problem in the Euclidean space. (Russian summary) (R3a:15068)
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Sun, He Sheng On the Tricomi problem of infinitesimal deformation equation for surfaces with mixed curvature. (83f:S3047)

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Volkodavov, V. F. (with Nikolaev, N. Ya.) The local extremum principle for a hyperbolic

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35Nxx Overdetermined systems [See also 58G05, 58G07, 58Hxx.]

35N05 Constant coefficients

Bratti, Giuliano Solution, in R², of the second conjecture of De Giorgi. (Italian) 83c:35009

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35N10 Variable coefficients, general

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Maire, H.-M. Résolubilité et hypoellipticité de systèmes surdéterminés. [Solvability and hypoellipticity of overdetermined systems] (83k:35026)

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35N15 3-Neumann problem and generalizations; formal complexes [See also 32Fxx and 58G05.]

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Hsiao, George C. (with Wendland, W. L.) The Aubin-Nitsche lemma for integral

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Lacur, Bernard Propagation des singularités pour des équations hyperboliques à caractéristique de multiplicité au plus double et singularités masloviennes.

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39-XX FINITE DIFFERENCES AND FUNCTIONAL **EQUATIONS**

39-01 Elementary exposition, textbooks

39-02 Advanced exposition (research surveys, monographs, etc.) secondary classifications:

Mirolyubov, A. A. (with Soldatov, M. A.) *Липейтые однородиме раз anneuma. (Russian) [Linear homogeneous difference equations] (83c:39001) ov, M. A. See Mirolyubov, A. A., (83c:39001)

39-03 Historical (must also be assigned at least one classification number from Section 01)

Korolyuk, L. G. See Kushnir, E. A., 83k:39001 Kushnir, E. A. (with Korolyuk, L. G.) The series method in the development of difference and differential-difference-equations. (Ukrainian. Russian summary)

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Jussila, Olli History of the functional equation f(x+y)=f(x)+f(y). (Finnish. English summary) (83d:01033)
(Mitrinović, Dragoslav S.) See Dragoslav S. Mitrinović: life and work, (83d:01074)

iography: Mitrinović, Drago rinović, Dragoslav S. *Драгослав С. Митриновиќ: живот и дело. [Dragoslav S. Mitrinović: life and work] (83d:01074)

graphy: Mitrinović, Dragoslav S. See Dragoslav S. Mitrinović: life and work, (83d:01074) agoslav S. Mitrinović: life and work: *Драгослав С. Михриновиќ: живот и дело. [Dragoslav S. Mitrinović: life and work] (83d:01074)

39-04 Explicit machine computation and programs (not the theory of computation or programming)

39-06 Proceedings, conferences, etc.

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39A05 General

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Potts, Renfrey B. Differential and difference equations. (83):34015)

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39A11 Stability of difference equations

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Bopaev, K. (with Nysambaev, Zh.) Stability of solutions of a system of nonlinear

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Opris, Gh. Sur certaines équations fonctionnelles d'ordre supérieur. (Romanian summary) [On certain higher-order functional equations] (83:39009)

Volkmann, Peter (with Weigel, Herbert) Systeme von Funktionalgleichungen. [Systems of functional equations] (83e:39014)

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Petyukh, G. P. Construction of solutions of nonlinear functional equations in the neighborhood of singular points. (Russian) (See 834:34004)

ov, E. I. Investigation of the functional equation

 $f(\sqrt[n]{x^n+y^n}) = F(g(x),h(y),l(x),k(y))$ over a ring of continuous functions over R. (Russian) 83k:39011

Vasic, P. M. (with Janic, Radovan R.; Pečarić, Josip E.) On some functional equations of Pexider's type. (Serbo-Croatian summary) 834:39008

secondary classifications:

Maksa, Gy. Solution on the open triangle of the generalized fundamental equation of information with four unknown functions. (83k:94015)

Nilmö, Kiyoshi On the functional equation $(e^M - \gamma)^k (e^M - \delta)^{m-k} = f^m (e^H - \sigma) k(e^M - \tau)^{m-k}$. (83b:36024)

nn, Peter (with Weigel, Herbert) Sur la solution de certaines équations fonctionnelles. (Polish summary) [On the solution of certain functional equations] (83e:39005)

Weigel, Herbert See Volkmann, Peter, (83g:39005)

39B40 Equations for functions of several variables

Acził, J. Information functions on open domain. III. 83a:39010c Chung, J. K. A generalization of a linear functional equation. II. (Serbo-Croatian mmary) 83h:39012

Ebanks, Bruce R. The general symmetric solution of a functional equation arising in the mixed theory of information. 83j:39007

Haraki, Shigeru See Tsutsumi, Akira, 83j:39008
 Ng, C. T. Information functions on open domains. 83a:39010a
 Information functions on open domains. II. 83a:39010b

Tsutsumi, Akira (with Haruki, Shigeru) Functional equations and hypoellipticity. 831-39008

secondary classifications:

Benz, Walter Correction to: "On a functional equation arising from hyperbolic geometry" [Aequationes Math. 21 (1980), no. 1, 113-119; MR 82b:51024]. (83e:51023)

Hooda, D. S. (with Tuteja, R. K.) Two generalized measures of "useful" information. (834-94013)

appan, Pl. On some functional equations from additive and nonadditive measures.

Losonezi, L. A characterization of entropies of degree α. (83f:94019)
Maschio, Giovanni Functions which are invariant or pseudoinvariant under changes of scale. (Italian) (83e:94055)

Tuteja, R. K. See Hooda, D. S., (83d:94013)

39B50 Functional equations on algebraic structures

Borelli Forti, Costanza (with Forti, Gian Luigi) On the structure of semigroups occurring in the representation of the solutions of a functional equation. (Italian summary) 83m:3900

Forti, Gian Luigi See Borelli Forti, Costanza, 83m:39007 Heuvers, Konrad J. Functional equations which characterize n-forms and homogeneous nctions of degree n. 83h:39013

Krapek, A. Strictly quadratic functional equations on quasigroups. I. 83h:39014
Opris, Gh. Sur certaines équations fonctionnelles d'ordre supérieur. (Romanian summary) [On certain higher-order functional equations] 83j:39009

Polonija, Mirko Associativity and r-ary cyclic bisymmetry. 834:39010
Shtern, A. I. Stability of homomorphisms into the group R*. (Russian. English summary)

Sweet, L. On the generalized cube and octahedron functional equations. 834:39011 Székelyhidi, László On a stability theorem. 83a:39012 On a theorem of Baker, Lawrence and Zorzitto. 83a:39011

Taylor, M. A. A Pexider equation for functions defined on a semigroup. 834:39012

Reich, Ludwig Über die allgemeine Lösung der Translationsgleichung in Potenzreihenringen. [On the general solution of the translation equation in rings of power series] (83k:39008)

39B60 Matrix functional equations

secondary classifications:

Bruschi, Massimo (with Levi, D.; Ragnisco, O.) The discrete chiral-field hierarchy. (83):58057)

Levi, D. See Bruschi, Mansimo; et al., (83j:50057) Ragnisco, O. See Bruschi, Massimo; et al., (83j:50057)

39B70 Functional equations on abstract spaces or structures

ngelov, V. G. (with Balnov, Drumi D.) Existence and uniqueness of the global solution of mth-order nonlinear functional equations in a Banach space. (Russian. English and Bulgarian summaries) 80g:59907 sinor, Drumi D. Ser Angelov, V. G., 83g:39007 under, Wolfgang Eine Punktionalgleichung für operatorwertige Funktionen. (English summary) [A functional equation for operator-valued functions] 83g:39008

secondary classifications

Schwaiger, Jens Eine algebraische Charakterisierung des Normalformenproblems für autonome Differentialsysteme. [An algebraic characterization of the normal form problem for autonomous differential systems] (83f:34018)

39B99 None of the above, but in this section

Feny6, István (with Forti, Gian Luigi) On the inhomogeneous Cauchy functional ation. 83a:39013

Forti, Gian Luigi See Fenyé, Istvim, 83a:39013

Kannappan, Pl. (with Ng, C. T.) On functional equations and measures of information.

II 83b:39015

Lyapin, L. N. Upper and lower solution of equations of evolution type. (Russian) 836:39009

Ng, C. T. See Kannappan, Pl., 83h:39015

secondary classifications:

Derfel', G. A. The behavior of solutions of functional and functional-differential equations with certain transformations of the argument. (Russian) (83i:34087) awaki, Wojciech On a concept of (α, k) -computation. (Russian summary)

39C05 Functional inequalities [See also 26Dxx.]

Agarwal, Ravi P. See Thandapani, E., 83a:39014
Batty, Charles J. K. (with Pelling, M. J.; Rogers, D. G.) Some recurrence relations of recursive minimization. 83e:39011

(with Rogers, D. G.) Some maximal solutions of the generalized subadditive inequality. 83j:39010

Miloranović, Gradimir V. See Vasić, P. M.; et al., 83e:39013 Miloranović, Igor Ž. See Vasić, P. M.; et al., 83e:39013 Pelling, M. J. See Batty, Charles J. K.; et al., 83e:39011

Powarka, Z. On functional inequalities in linear topological space. (See 83k:34004)
Redheffer, R. M. (with Walter, Wolfgang) A comparison theorem for difference inequalities. 83e:39012

Rogers, D. G. See Batty, Charles J. K.; et al., 83e:39011 and 83j:39010

Thandapani, E. (with Agarwal, Ravi P.) Some new discrete inequalities in two independent variables. 83a:39014

Vasić, P. M. (with Milovanović, Gradimír V.; Milovanović, Igor Ž.) Some

considerations on functional inequalities. I. 83e:39013

Volkmann, Peter (with Weigel, Herbert) Systems von Funktionalgleichungen. [Systems of functional equations] 83e:39014

Sur un système d'inéquations fonctionnelles. [On a system of functional inequalities] 83k:39010

Walter, Wolfgang See Rotheffer, R. M., 83e:39012 Weigel, Herbert See Volkmann, Peter, 83e:39014

secondary classifications:

Ekeland, Ivar Ioffe's mean value theorem. (#3h:26024) Ratz, Jürg On approximately additive mappings. (#3e:90131)

40-XX SEQUENCES, SERIES, SUMMABILITY

40-01 Elementary exposition, textbooks

Combes, Jean ★Suites et séries. (French) [Sequences and series] #3d:40001 Schell, H.-J. *Unendliche Reihen. (German) [Infinite series] 83k:40001

secondary classifications:

Brychkov, Yu. A. See Prudnikov, A. P.; et al., (83b:00009)
Marichev, O. I. See Prudnikov, A. P.; et al., (83b:00009)
Prudnikov, A. P. (with Brychkov, Yu. A.; Marichev, O. I.) **Harrerpans = pans. (Russian) [Integrals and series] (83h:00009)

40-02 Advanced exposition (research surveys, monographs, etc.)

Chelidze, V. G.

† Некоторые методы сумынрования двойных радов в двойных интегралов. (Russian) [Sammability methods for double series and double integrals] 83g-40001

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40-03 Historical (must also be assigned at least one classification number from Section 01)

secondary classifications:

et, L. S. The discovery of Tauberian theorems. (French and German summaries)

ski, Ch he The long history of continued fractions and Padé approximate

40-04 Explicit machine computation and programs (not the theory of computation or programming)

40-06 Proceedings, conferences, etc.

40Axx Convergence and divergence of infinite limiting processes

mbes, Jean *Suites et séries. (French) [Sequences and series] (83d:40001)

40A05 Convergence and divergence of series and sequences

untacharyya, S. K. (with Lahiri, B. K.) On properties of subseries. 83b:40002
ununond, J. E. On interpreting the sums of asymptotic series of positive terms.
83m:40001
oru, Christopher Olutunde An integrability theorem for power series. (Italian

mary) 83e:40001

Johnston, Egin H. A generalized comparison test. 83a:40001 Rearrangements that preserve rates of divergence. 83i:40002 Karadiić, L. On the convergence of series $\Sigma(a_n a_n - \beta_n b_n)$. (Serbo-Croatian summary)

83a:40002 lewaki, Chris 83a-60002

Kowalewaki, Christine Accelération de la convergence pour certaines suites à convergence logarithmique. [Acceleration of convergence for certain sequences of logarithmic convergence] 83k-60001

Lahiri, B. K. See Bhattacharyya, S. K., 83k-60002

Mannino, Antonino Some classic Stolz-Cesàro theorems. (Italian) 83d-60002

Móricz, Ferenc The regular convergence of multiple series. 83g-80002

Păvăloia, Ion Sur l'ordre de convergence des méthodes d'itération. [On the order of convergence of iteration methods] 83m-60002

Pana. Sevis. On a problem of P. Erdős and G. Weiss, (Romanian, English summary)

Popa, Sorin On a problem of P. Erdős and G. Weiss. (Romanian. English summary)

Takeuchi, Yu Systematic studies of certain sequences. (Spanish) 83g:40003

secondary classifications:

Akita, Minoru (with Kano, Takeshi) On the convergence of $\sum_{n=1}^{\infty} n^{-n} \sin(n^{\beta}0)$.

(83sc:10064)

Beigel, Richard Rearranging terms in alternating series. (83d:26007)

Gu, Yi Ming See Zhou, Zi Fang; et al., (83s:81088)

Statison, Sven-Ake Convergence acceleration on a general class of power series.

(German summary) (83m:65005)

némez Guerra, Pedro (with Soler, M.) Sur la propriété de Darboux [On the Darboux property] (83b:28004)

insonbungh, Richard The trapezoid rule, Stirling's formula, and Euler's constant.

no, Takeshi See Akita, Minoru, (83m:10064)

Kostyrko, Parel Note to the exponent of convergence. (Russian and Slovak summaries)

(with Salat, Tibor) On the exponent of convergence. (German summary) (83m:54057)

Mao, De Qiang See Zhou, Zi Fang; et al., (83a:81088)

Müller, G. O. (with Trautner, R.) A uniform Fatou-Riesz theorem in Banach sequence ces. (83e:

Nomoto, Hisao See Tuguė, Tosiyuki, (83g:03053)
Rath, D. (with Tripathy, B. K.) On some classes of regular matrices. (83g:46
Rudakov, S. A. Existence of pseudoconvergent subsequences and summationpseudoconvergent sequences in Banach spaces. (Russian) (83c:46012)
Šalit, Tibor See Kostyrko, Pavel, (83m:54057)

m Analysis of convergence of the T-transformation for power series. (83±41039)

Soler, M. See Jiménez Guerra, Pedro, (83b:28004)

Tandori, Károly Beitrag zur Konvergenz der Orthogonalreihen. [Contribution to the convergence of orthogonal series] (83a:46004)

Trautner, R. See Miller, G. O., (83c:46006)

Tripathy, B. K. See Rath, D., (83g:46006)

Tugué, Toslyuki (with Nomoto, Hisao) Independence of a problem in elementary

analysis from set theory. (83g:03053)

Wimp, Jet Accelerating convergence by root finding. (83a:65006)
 Wu, Hang Sheng See Zhou, Zi Fang; et al., (83a:81085)
 Zhou, Zi Fang (with Wu, Hang Sheng; Mao, De Qiang; Gu, Yi Ming) The problem of convergence radius of the T_c series solution. (83a:81085)

40A10 Convergence and divergence of integrals

Vukmirović, Jovan Asymptotic properties of certain sequences of integrals of real functions. 83f:40001

Zaini, S. Zahid Ali A theorem on the integrability of power series. (Turkish summary)

oru, Christopher Olutund summary) (83e:40001) nde An integrability theorem for power series. (Italian

40A15 Convergence and divergence of continued fractions [See also 30B70.1

ake, Wejclech On some conditions for convergence of branched continued ctions. 83g:40004 fracti

Thron, Wolfgang J. (with Waadeland, Haakon) Convergence questions for limit periodic continued fractions. 83e-40002
Waadeland, Haakon See Thron, Wolfgang J., 83e:40002

secondary classifications

was, S. N. See Singh, Virendra; et al., (83:81011) ezinski, Claude The long history of continued fractions and Padé approximan (83j:01003)

Churchhouse, Robert F. Continued fractions of the Rogers-Ramanujan type. (83:10011)
Datta, Kamal Kumar See Singh, Virendra; et al., (83:81011)
Denk, Hans (with Riederle, Max) A generalization of a theorem of Pringsheim.

(83i:46061)

nk, E. Continued fraction expansions for kth roots. (83e:65026)

Krupka, Z. I. A method for computing an upper bound for a continued fraction.
(Ukrainian. Russian summary) (83:65016)
Riederle, Max See Denk, Hans, (83:46061)

igh, Virendra (with Biswas, S. N.; Datta, Kamal Kumar) Continued fraction theory of the rotating harmonic oscillator. (83:81011)

40A20 Convergence and divergence of infinite products

Withers, C. S. Infinite products. 83d:40003

secondary classifications:

Churchhouse, Robert F. Continued fractions of the Rogers-Ramanujan type. (83j:10011)
Walter, Wolfgang Old and new approaches to Euler's trigonometric expansions.
(83e:01032)

40A25 Approximation to limiting values (summation of series, etc.) {For the Euler-Maclaurin summation formula, see 65B15.}

Fiedler, Heinz (with Jurkat, W. B.) A remark on best approximation of alternating series. 83i:40001b

Jurkat, W. B. (with Shawyer, B. L. R.) Best approximations of alternating series.

See also Fiedler, Heinz, 83:40001b

Satō, Kōhei On acceleration procedures of some slowly convergent infinite summations.

Shawyer, B. L. R. See Jurkat, W. B., 83i:40001a

secondary classifications:

Sidi, Avram Analysis of convergence of the T-transformation for power series. (83d:41039)

40A30 Convergence and divergence of series and sequences of functions

Gautschi, Walter A note on the successive remainders of the exponential series. 83j:40001

Jones, Bush A note on the T_{+m} transformation. 83e-40003 Sövegjártó, A. P. On the divergence of orthogonal series. 83a-40003 Tandori, Károly Beitrag zur Konvergenz der Orthogonalreihen. [Contribution to the convergence of orthogonal series] 83a-40004

secondary classification

scu, Lidia See Tomescu, F. M. G., (83k:94009)

Kha Zui Bang Applicability of infinite-order composite differential operators with constant coefficients. (Russian) (83m:34061)

Tomescu, F. M. G. (with Constantinescu, Lidia) Errors of power performs computation by Haar series expansions. (French and German summaria

ummaries) (83k:94009) Wagner, Gerold Note on irregularities of distribution. (83d:10066)

40A99 None of the above, but in this section

Fisher, Brian On the summation of finite series. 83i:40002 Jovanović, Miroslav R. See Lacković, Ivan B., 83b:40004 Lacković, Ivan B. (with Jovanović, Miroslav R.) On a class of real sequences which satisfy a difference inequality. (Serbo-Croatian sum

40B05 Multiple sequences and series (should also be assigned at least one other classification number in this section)

40Cxx General summability methods

40C05 Matrix methods

Davidov, M. O. K-matrices that are equivalent to a matrix of arithmetic means on a set of bounded sequences. (Russian) 83h:46063

DeFranza, James Products of summability methods. 83i:40063

(with Fleming, Daniel J.) The Banach algebra of conservative triangular matrices.

Fleming, Daniel J. See DeFranza, James, 83m:40004

Jurkat, W. B. (with Shawyer, B. L. R.) On continuous maps of sequence spaces.

83g-40005

Malenica, Mirjana Solution of the functional equation $\varphi(x)+\varphi(f(x))=F(x)$ and some special regular transformations. (Serbo-Croatian. French summary) 83i-40004

Mursaleen Matrix transformations and generalized almost convergence. 83i-40005a

Matrix transformations and generalized almost convergence. II. (Turkish summary) 83i:40005b

Pobyvanets, I. P. Asymptotic equivalence of some linear transformations, defined by a nonnegative matrix and reduced to generalized equivalence in the sense of Cesaro and Abel. (Russian) 83h:48004

Rath, D. (with Tripathy, B. K.) On some classes of regular matrices. 83g:400 (with Tripathy, B. K.) Note on the maximal group of triangular conservative matrices. 83m:40005

ades, B. E. Some applications of strong regularity to Markov chains and fixed point theorems. 83d:40004

yer, B. L. R. See Jurkat, W. B., 83g:40005

Shi, Xian Liang The Lebesgue constants and Gibbs phenomenon for the nonnegative (f,d_a)-summability method. (Chinese. English summary) 83k:40003

en, S. M. Matrix transformations of $c_0(p)$, $l^\infty(p)$, l^p and l into χ . 83ho40005

Sridher, S. Bounded index and summability methods. 83g:40007a Corrigendum to: "Bounded index and summability methods". 83g:40007b Bounded index and summability methods. II. 83g:40006

Tripathy, B. K. See Rath, D., 83g:40006 and 83m:40

secondary classifications:

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Belley, J.-M. A measure theoretic approach to fixed points in ergodic theory. (83i:47012) Gupta, S. K. See Mursaleen, (83b:42030) Jaynsri, C. On generalized Lototsky summability. (83j:40006)

yasıl, C. On generalized Lototsky sammability. (83):40006) agy, T. A. On a gap Tauberian theorem of Lorentz and Zeller. (83k:40007)

en (with Gupta, S. K.) Walsh functions and generalized almost convergence. (83b:42030)

Rhoades, B. E. Generalized Hausdorff matrices bounded on l^p and c. (83h:47041) Siddiqi, Rafat Nabi A strengthened form of a theorem of Fejer by means of

Fourier-Young coefficients. (Arabic summary) (83d:42014)
masundaram, D. On a theorem of Brudno over non-Archimedian fields. (83g:12017)

Somegiarto, A. P. On the divergence of orthogonal series. (83s:49003)

Terpe, Frank On convergence in the space of matrix summations. (83s:28010)

Upreti, Rita On sequence-to-sequence transformations. (83f:44004)

40C10 Integral methods

Maravić, Manojlo Rk means of functions. (Serbo-Croatian. English summary) 83/p40002

40C15 Function-theoretic methods (including power series methods and semicontinuous methods)

40C99 None of the above, but in this section

Tali, A. Zero-convex families of summability methods. (Russian. English summary) R3k:40004

secondary classifications:

Tanović-Miller, N. On strong summability. II. (Serbo-Croatian summary) (83b:40007)

40Dxx Direct theorems on summability

40D05 General theorems

penchuk, K. M. Conditions for the absolute summability of series in powers of p. (Russian) 83p-40009

secondary classifications:

nacostas, Georges C. Sur les procédés merceriens du type de Hausdorff. [On Mercerian processes of Hausdorff type] (83):40005)

40D09 Structure of summability fields

secondary classifications:

Rath, D. (with Tripathy, B. K.) Note on the maximal group of triangular conservative

Tripathy, B. K. See Rath, D., (83m:40005)

40D10 Tauberian constants and oscillation limits

Balci, Mustafa On Tauberian constants for $F(c, \mu)$ -transforms. (Turkish summary) 83b:40

totskli, V. A. Cores of Borel means for unbounded sequences. (Russian. English summary) 83h:40005

40D15 Convergence factors and summability factors

Baron, S. Absolute summability factors in a sequence. (Russian. English summary)

kulananda See Mohapatra, Ram Narayan, 83d-40005 tra, Ram Narayan (with Das, Gokulananda) Inclusion theorems for summability ors. 83d-40005

econdary classificatio

Balser, Werner (with Jurkat, W. B.; Peyerimhoff, Alexander) On linear functionals and summability factors for strong summability. II. (836-46067)
Bhattacharyya, S. K. (with Lahiri, B. K.) On properties of subseries. (836-66062)
Jurkat, W. B. See Balser, Werner; et al., (836-66007)
Lahiri, B. K. See Bhattacharyya, S. K., (836-66002)
Leiger, T. Summability factors for generalized summability methods. (Russian. German

summary) (Klus-1009)
Peyerimhoff, Alexander See Balser, Werner; et al., (K3d-10007)
Varshney, K. C. On the $|\vec{N}, p_i|$ -summability factors of infinite series. (K3a-98)

40D20 Summability and bounded fields of methods

Galic, Mihailo Summation of a special series. (Serbo-Croatian. Russian summary)
R3k-40006

40D25 Inclusion and equivalence theorems

Leiger, T. Inclusion of generalized summability methods. (Russian. German summary)

83j-1003
Neuser, Rolf Durch Matrixverschiebungen erweiterte Konvergenzbegriffe. [Concepts of convergence extended by matrix shifts] 83g-40010

Çakar, Öner The space of sequences of which A-transforms are in l_p . (Turkish sum

Pobyvanets, L. P. Asymptotic equivalence of some linear transformations, defined by a nonnegative matrix and reduced to generalized equivalence in the sense of Ceshro and

Abel. (Russian) (83h:40064)
Tanaka, Minoru On generalized Nörlund methods of summability. II. (83e:40007)

40D99 None of the above, but in this section

Parashar, Vinod K. On (N, P_n) and $(K, 1, \alpha)$ summability methods. 83e:40004

40Exx Inversion theorems

40E05 Tauberian theorems, general

Johansson, Bo Some distributional Tauberian theorems. 83m:40006 Khristov, V. Kh. (with Petrushev, P. P.) On Tauberian theorems for power series and

dication to Fourier series. 83c-400

Krishnan, V. K. On the relation of generalized Valiron summability to Cesàro

summability. 83a:40005 rtic, Branislav On some Mercerian theorems. 83k:40005

Meyer-König, Werner (with Zeller, Karl) Tauber-Sätze and M-Perfektheit. [Tauberian theorems and M-perfectness] 83d:40006 rushev, P. P. See Khristov, V. Kh., 83c:40001

m Version "en moyens ne" du théorème taubérien de Wiener. (English summary) [A version in the mean of the Tauberian theorem of Wiener] 83k:40006 Reimers, E. Multiplier summability methods and theorems of Tauberian type. (Russian.

English summary) 83g:40011

Sukla, Indulata A Tauberian theorem for strong Abel summability type. 83e:40002

Tammeraid, I. Some Tauberian theorems with remainder. (Russian. English summary)

Zeller, Karl See Meyer-König, Werner, 83d:40006

secondary classifications:

Borwein, Duvid (with Watson, Bruce B.) Tauberian theorems between the logarithmic and Abel-type summability methods. (83ne.40007)

Greene, Daniel H. (with Knuth, Donald ≥.) ★Mathematics for the analysis of algorithms. (83e.68045)

Aggorithms. (accious)

Karagaeva, T. A. Summation of series by means of systems of polynomials with regular asymptotic behavior. (Bulgarian. English and Russian summaries) (K3j:3004B)

Knuth, Donald E. See Greene, Daniel H., (83c:68045)

Watson, Bruce B. See Borwein, David, (83m:40007)

40E10 Growth estimates

secondary classifications:

aller, U. A refined Tauberian theorem for Laplace transforms in dimension d>1.

40E15 Lacunary inversion theorems

Gaier, Dieter Gap theorems for logarithmic summability. 83a:40006 Keagy, T. A. On a gap Tauberian theorem of Lorentz and Zeller. 83k-46607

40E20 Tauberian constants

40E99 None of the above, but in this section

Tanović-Miller, N. A Mercerian theorem for slowly varying sequences. #3e:40006

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Xu, Li Zhi Self-reciprocal functions and self-reciprocal transforms. (Chinese summary)

secondary classification

Tall, A. Zero-convex families of summability methods. (Russian. English summary)

40F05 Absolute and strong summability

Aggarwal, Anandita Some remark 83i:40007 Alauddin See Khan, F. M., 83a:4 dita Some remarks on relation between Nörlund and Riesz mean

Alauddin See Khan, F. M., 83a-40007

Balser, Werner (with Jurkat, W. B.; Peyerimhoff, Alexander) On linear functionals and summability factors for strong summability. II. 83d-40007

Jurkat, W. B. See Balser, Werner; et al., 83d-40007

Khan, F. M. (with Alauddin) On [N, p_n] summability factors. (Turkish summary)

Kumar, Arun (with Sahu, D. P.) Absolute convergence fields of some triangular matrix methods. 83a:40006

Pandey, Brahma Nand On the strong summability of ultraspherical series. (Hindi. English summary) 83k:40007

Peyerimhoff, Alexander See Balser, Werner, et al., 83d:40007

Sahu, D. P. See Kumar, Arun, 83a:40008

Sana, D. P. See Rumar, Aran, 838-8008
Schaper, Ralf On generalized strong Norlund summability fields. 83i:40008
Tanoviè-Miller, N. On strong summability. II. (Serbo-Croatian summary) 83b-40007
Thorpe, B. A note on strong Riesz summability. 83k-40008
Varshney, K. C. On the |\overline{N}, p_n|-summability factors of infinite series. 83a:40009

secondary classifications:

Arfin, Khurshidul See Saxena, Ashok; et al., (83e:42016)
Chandra, Prem Necessary and sufficient conditions for the absolute Euler summability.
(83i:42007)

Das, Gokula

Gokulananda See Mohapatra, Ram Narayan, (83d:40005) fler, László (with Schwinn, H.) Über die absolute Summierbarkeit der

Orthogonalreihen. [On the absolute summability of orthogonal series] (83e:42011)

Mohapatra, Ram Narayan (with Das, Gokulananda) Inclusion theorems for summability factors. (83d:46005)

dra See Saxes

Prasad, Rajendra See Saxeua, Ashok; et al., (83e-42010) Saxena, Ashok (with Prasad, Rajendra; Arfin, Khurshidul) On the strong (L) summability of the (C, 1) mean of the derived series of the Fourier series. (83e:42010) winn, H. See Leindler, László, (83e:42011) penchuk, K. M. Conditions for the absolute summability of series in powers of p.

(Russian) (83g-40009)

40Gxx Special methods of summability

40G05 Cesàro, Euler, Nörlund and Hausdorff methods

Alpar, L. On the linear transformations of series summable in the sense of Cesaro.

Markett, C. Mean Cesaro summability of Laguerre expansions and norm estimates with shifted parameter. (Russian summary) 83j:40004

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41A65 Abstract approximation theory (approximation in normed linear spaces and other abstract spaces)

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41A99 Miscellaneous topics

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Schempp, Walter See Delvos, F.-J., (83b:65039)
Starodetko, E. A. ★Акторытым и примеры решеник уравшений. (Russian) [Algorithms and examples of the solution of equations] (83m:65038)
Szabó, Zoltán Über gleichungslösende Iterationen ohne Divergenzpunkt. III. (English and Russian summaries) [On equation solving iterations without point of divergence. III] (836:65074)

Zwick, D. Properties of functions generalized convex with respect to a WT-system. (83e:26012)

42-XX FOURIER ANALYSIS

42-01 Elementary exposition, textbooks

Edwards, R. E.

Fourier series. Vol. 2. 83k:42001

de Figueiredo, Djairo Guedes

Análise de Fourier e equações diferenciais parciais.

(Portuguese) [Fourier analysis and partial differential equations] 83k:42001

Hanna, J. Ray

Fourier series and integrals of boundary value problems. 83k:42001

secondary classificat

Blatter, Christian *Analysis. III. (German) (83a:26002)

Combes, Jean *Suites et séries. (French) [Sequences and series] (83d:40001)

(Dhombres, N.) See Rudin, Walter, (83f:26001) (Hoffman, F.) See Rudin, Walter, (83f:26001)

Hua, Luo Geng *Starting with the unit circle. (83):00001)

Jones, Douglas Samuel ★The theory of generalised functions. (83k:46035)
Киdryavtsev, L. D. ★Курс математического анализа. Том П. (Russian) [A course in

ematical analysis. Vol. II] (83h:26001) Mallavin, P. * Intégration et probabilités. Analyse de Fourier et analyse spectrale.

(French) [Integration and probabilities. Fourier analysis and spectral analysis]

(83):28001)

Mikolas, Miklos *Valós függvénytan és ortogonális sorok. (Hungarian) [Real functions and orthogonal series] (834:26003)

Rudin, Walter *Analyse réelle et complexe. (French) [Real and complex analysis]

Schell, H.J. *Unendliche Reihen. (German) [Infinite series] (83k:40001) (Weltin, Kuniko) See Hua, Luo Geng, (83j:00001)

42-02 Advanced exposition (research surveys, monographs, etc.)

Busko, Edmond (with Long, Rui Lin) Quelques problèmes sur les séries trigonométriques. [Some problems on trigonometric series] 83g:42001

Long, Rui Lin See Busko, Edmond, 83g-42001

Stein, Elias M. The development of square functions in the work of A. Zygmund.

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42-03 Historical (must also be assigned at least one classification number from Section 01)

secondary classifications:

Calderón, Alberto (with Fabes, Eugene B.; Sagher, Yoram) Nestor M. Rivière: June 10, 1940-January 3, 1978. (83a:01041)

Fabes, Eugene B. See Calderón, Alberto; et al., (83a:01041)

Grosswald, Emil An orthonormal system and its Lebesgue constants (a lost and found

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42-04 Explicit machine computation and programs (not the theory of computation or programming)

T

42-06 Proceedings, conferences, etc.

ns and operators, 83d:42001

(Nikol'skii, N. K.) See Spectral theory of function (Ricci, Fulvio) See Harmonic analysis, 83c:42001 (Weiss, Guido) See Harmonic analysis, 83c:42001

Harmonic Analysis See Harmonic analysis, 83c:42001 Harmonic analysis *Harmonic analysis. 83e:42001 Minneapolis, Minn. See Harmonic analysis, 83e:42001

Harmonic Analysis ★Seminaire d'Analyse Harmonique, 1980–1981. (French)
[Seminar on Harmonic Analysis, 1980–1981] 836-42001

Spectral theory of functions and operators ★Спектральная теория функций в операторов. II. (Russian) [Spectral theory of functions and operators. II] 836-42001

Towards the Revival of the Complex Method in Fourier Analysis See Towards the revival of the complex method in Fourier analysis, 83d:42002

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42Axx Fourier analysis in one variable

42A05 Trigonometric polynomials, inequalities, extremal problems

 Chorbedzhiev, D. P. Formulas and nomograms for computing sums of certain trigonometric series. (Bulgarian. English and Russian summaries) 83es42001
 Gevrilyuk, V. T. Asymptotic estimation of the deviation of trigonometric interpolation polynomials with equidistant nodes in the class of periodic functions H^{w3, w2}2. (Russian) RNo-42003

Ivorié, Miodrag Boundedness of the norms of trigonometric polynomials and their application to summability methods for Fourier series. (Russian) 83j-42001
Laurinčíkae, Antanas Distribution of trigonometric polynomials. (Russian. English and Lithuanian summaries) 83ls-42001

Nulton, James D. (with Stolarsky, Kenneth B.) The first sign change of a cosine polynomial. 83le42002

nerstorfer, Franz On an extremal problem for nonnegative trigonometric polynomials and the characterization of positive quadrature formulas with Chebyshev weight

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Szabados, Júzsef On some extremum problems for polynomials. 83h:42004
Zhuk, V. V. On an approximation method. (Russian. English summary) 83d:42003

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Kluushchev, S. V. (with Vinogradov, S. A.) Free interpolation in the space of uniformly convergent Taylor series. (83k:30632) Konyagin, S. V. On the Littlewood problem. (Russian) (83d:10045) Makrelov, I. A numerical method for simultaneous determination of all zeros of a given

trigonometric polynomial. (Bulgarian. English and Russian summaries) (83d:65155)

Privatov, A. A. On linear polynomial operators and their convergence. (83e:41024) Vinogradov, S. A. See Khrushchëv, S. V., (83b:30032)

42A10 Trigonometric approximation

Arestov, V. V. (with Chernykh, N. I.) On the L_2 -approximation of periodic functions by trigonometric polynomials. 83e:42002

Baskakov, V. A. Asymptotic behavior of an approximation of periodic differentiable functions by operators of class S_{2m} . (Russian) 83e:42002

On the order of approximation and the norms of linear summation methods for Fourier series. 83c:426

Chan, K. Y. (with Chen, Yung-ming; Liu, Ming Chit; Ng, Shu Ming) An example on strong unicity constants in trigonometric approximation. 83a:42002 Chen, Yung-ming See Chan, K. Y.; et al., 83a:42002 Chernykh, N. I. See Arestov, V. V., 83a:42002

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Criteria for asymptotically optimal processes. 83h:42005

werkamp, Richard Approximations@tte der Ableitungen bei trigonometrischer

Interpolation. [The closeness of approximation of the derivatives in trigonometric interpolation] 83d:42004

Khan, Arman On the degree of approximation of K. Picard and E. Poisson-Cauchy singular integrals. (French summary) 83j:42002 singular integrals. (French summary) 83
See also Wafi, A.; et al., 83b:42003

Kirkorov, I. Approximation of semicontinuous functions by monotone sequ trigonometric polynomials. (Russian. English and Bulgarian summaries) 83k:42004

Kro6, Andris A comparison of uniform and L_p -approximations. 824-42005 Leindler, László On imbedding of classes of functions connected with strong

approximation of Fourier series. 83f:42002 Liu, Ming Chit See Chan, K. Y.; et al., 83a:42002

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On the degree of approximation to a function belonging to weighted $(L^p, \psi(t))$ class by means of a conjugate series. 83g:42002

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series. (Hindi. English summary) 83j:42003

Stepanets', O. I. Simultaneous approximation of periodic functions and their derivatives by Fourier sums. (Russian) 83e-42003

Sun, Yong Sheng The exact constant of approximation for Cesàro operators. (Chinese)

Telyskorskii, S. A. Approximation of functions of class \overline{W}^1 by Cesàro means. (Russian) R3m:42001

Temlyskov, V. N. Approximation of continuous functions by trigonometric polynomials. (Russian) 83h:42006

Totik, Vilmos A general theorem on strong means. 83j:42005

On a possible generalization of strong approximation results. 83f:42003

Umar, S. See Wafi, A.: et al., 83b:42003

Wall, A. (with Khan, Arman; Umar, S.) A note on the order of approximation of Gauss-Weierstrass singular integral. 83b:42003

Waterman, Daniel Estimating functions by partial sums of their Fourier series. 83i:42002
Xie, Ting Fan On the approximation of differentiable functions by de la Vallée-Poussin sums. (Chinese) 83f:42004

Ye, Mao Dong Some results about $E_n(W_j^*)_p$. (Chinese: English summary) 83j-42006 Zhuk, V. V. Approximation of periodic functions by linear approximation methods. (Russian. English summary) 83m:42002

Approximation of functions with nonnegative Fourier coefficients by FOTA, O. G. linear methods. (Russian) 83a:42003

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Badkov, V. M. Approximation by Fourier expansion in terms of orthogonal polynomials. (K3c:42022)

(Relaws, V. A. Comparison of the orders of approximation and estimates of the norms of linear operators on classes C(e). (Russian) (83s-41024) imann, G. (with Junggeburth, J.; Stark, Eberhard L.) Improved approximation and Jackson's theorem. (83e-41016)

Jackson's theorem. (83c-41016)
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variables by de la Vallée-Poussin sums. (Russian) (83k-41023)
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upotative, L. D. Strong means of Marcinkiewicz type. (Russian. English and Georgian
summaries) (83i-42011)

Holland, A. S. B. A survey of degree of approximation of continuous functions. (834:41024)

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bert, P. V. On the mini num norm property of the Fourier projection in L^1 -spaces.

(83):43010)

Lanse, A. A. (with Daugavet, I. K.) Construction of operators in problems of optimal synthesis of harmonic signal transformers. (Russian. English summary) (83):65107)

Leindler, László Strong approximation and generalized Lipschitz Clauses. (83:e41023)

Mohapatra, Ram Narayan (with Sahney, Badri Narayan) Approximation by a class of linear operators involving a lower triangular matrix. (83:e41026)

Popov, Vasil Atamssov Averaged local moduli and their applications. (83:e41022)

Qureshi, Kufbuddin See Sharma, P. L., (83:e42016)

Sahney, Badri Narayan See Mohapatra, Ram Narayan, (83:e41026)

Schumacher, Robert On the uniqueness property of minimal projectors. (83):43011)

Sharma, P. L. (with Qureshi, Kutbuddin) On the degree of approximation to a function belonging to weighted (L^P, ψ(1)) class. (83:e42016)

Stark, Eberhard L. See Bleimann, G.; et al., (83:e41016) and (83):42016)

panets', O. I. *Passoucpusse mps@mxcoms rpsromoserpsrocxass nonmosass.
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(with Zaderel, P. V.) Approximation of periodic functions of several variables by

de la Vallée-Poussin sums. (Russian) (83j-41023)

Temlyakov, V. N. Approximation of periodic functions of several variables with a bounded mixed derivative. (Russian) (83b-41018)

Velikin, V. L. On limiting constraints between approximations of periodic functions by splines and trigonometric polynomials. (Russian) (83hc41014)
Zaderel, N. N. .Approximation of de la Vallée-Poussin sums on clauses of periodic

functions of two variables, defining polyharmonic operators. (Russian) (83j:44024) Zaderei, P. V. See Stepanets', O. İ., (83j:44023) and Bushev, D. N., (83k:44023)

42A15 Trigonometric interpolation

meuschneider, S. D. (with Sharma, Ambikeshwar; Smith, Philip W.) Convergence of lacunary trigonometric interpolation on equidistant nodes. 83h:42007 arma, Ambikeshwar See Riemenschneider, S. D.; et al., 83h:42007

Smith, Philip W. See Riemenschneider, S. D.; et al., 83h:42007

secondary classifications:

Agrawal, G. P. See Lax, Melvin. (83:65021)

Haverkamp, Richard Approximationsgüte der Ableitungen bei trigonometrischer

Interpolation. [The closeness of approximation of the derivatives in trigonometric interpolation] (83d:42004)

Lax, Melvin (with Agrawal, G. P.) Evaluation of Fourier integrals using B-splines. (831-65021)

Lorentz, G. G. Independent sets of knots and singularity of interpolation matrices. (83c-41002)

shwar (with Smith, Philip W.; Tzimbalario, J.) Polynomial interpolation on roots of unity with applications. (83c:41004) ith, Philip W. See Sharma, Ambikeshwar; et al., (83c:41004)

42A16 Fourier coefficients, Fourier series of functions with special properties, special Fourier series

Akhmedov, V. V. Fourier-Chebyshev-Hermite coefficients. II. (Russian) 83j-42007
Andersen, Kenneth F. On the transformation of Fourier coefficients of certain classes of functions. 83j-42008

risha, M. Fourier coefficients of some classes of functions. (Russian. Serbo-Croatian ary) 83a:42004

Bojanic, R. (with Stanojević, Časlav V.) A Jass of L¹-convergence. 83e:42004
Gulisashvili, A. B. Singularities of summable functions. (Russian. English summary) 83e:42005

Hatsu, Seiichi Differentiability of Riemann's function. 83e:42806
Kisłyakov, S. V. Fourier coefficients of boundary values of functions that are analytic in the disc and bidisc. (Russian) 83a:42005

Kottyar, B. D. Fourier coefficients and densities of sets of natural numbers. (Russian) R3m:42003

Maslov, A. V. Estimates of Hausdorff-Young type for Fourier coefficients. (Russi

N. Esumaies of Hausdorff-Toung type for Fourier coefficients. (R English summary) 83k-4206
 Miloradović, Slobodan Fourier coefficients of class W'H(δ₀)_L. (Russian) 83d-4200
 Saskyan, A. A. Integral moduli of smoothness and Fourier coefficients of the superposition of functions. (Russian) 83c-42004

n, Michael Fourier series of functions of generalized bounded variation. (See

(with Waterman, Daniel) On the magnitude of Fourier coefficients. 83h:42008

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Waterman, Daniel See Schramm, Michael, R3t-42008

Yang, Yi Qun A Hardy problem on trigonometrical series theory. 83e-42003

Yoneda, Kaoru Riemann-Lebesgue theorem. (Russian summary) 83e-42005

usko, Edmond (with Long, Rui Lin) Quelques problèmes sur les séries trigonométriques. [Some problèms on trigonométric series] (83g-82901) umbanis, Stamatis (with Habib, Muhammad K.) Finite sampling approximations for non-band-limited signals. (83b-34029) Freedman, David A. (with Lane, David A.) The empirical distribution of Fourier coefficients. (83:e5025)
Habib, Mahammad K. See Combania.

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Lai, C. D. Canonical correlation coefficients and Fourier coefficients. (83h:62073)

Lane, David A. See Froedman, David A., (83c:62026)

Long, Rui Lin See Bunko, Edmond, (83g:42001)

McGebee, O. Carruth (with Figno, Louis; Smith, Brent) Hardy's inequality and the Lincom of exponential sums. (83c:43002b)

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Padmanabham, Pasumarthi A. Equation

conjecture. (83c-43002a) Imasabham, Pasumarthi A. Fourier series for generalized Lauricella's function. (83c-33003)

Pigno, Louis See McGehee, O. Carruth; et al., (83c:43002a) and (83c-43002b)

latova, M. L. On some systems of linear operators connected with arithmetical inversion formulas. (83&10008)

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Shiba, Masaaki On the Fourier coefficients of a function of A-bounded variation. (83e:26011)

ith, Brest See McGehee, O. Carruth; et al., (83c:43002a) and (83c:43002b)

Sunouchi, G. Absolute summability of Fourier series. (834:42007)
Wang, Si Lei Some properties of the functions of A-bounded variation. (83k:26006)

42A20 Convergence of Fourier and trigonometric series

Ahmad, Z. U. (with Zaini, S. Zahid Ali) A note on L¹-convergence of Fourier series with 8-quasimonotone coefficients. 83k:42007

8-quasimonotone coefficients. 83ks-42007

Becker, Richard Edouard Une présentation des travaux de Carleson et Hunt, sur la convergence presque partout des séries de Fourier. [Summary of the work of Carleson and Hunt on a.e. convergence of Fourier series] 83k:42008

Dadu, Adrian Une méthode d'accélération de la convergence des séries trigonométriques.

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Demenko, V. N. Convergence almost everywhere of Fourier series with respect to orthonormal systems of Franklin type. (Russian) 82e-42007

Goffman, Casper Modification of functions. (See 83a:26004)

Jurshoe, Ole G. (with Mejlbro, Leif) *The Carleson-Hunt theorem on Fourier series.

hane, Jean-Pierre Homéomorphismes du cercle et séries de Fourier.

[Homeomorphisms of the circle, and Fourier series] 83m:42004

Inneng, K. D. A theorem on the convergence of the conjugate series of a Fourier series.

83d:42007 Körner, Thomas Everywhere divergent Fourier series. 83h:42010 Leindler, Lészló Strone approximation and the control of the con

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Leindler, Liszló Strong approximation and generalized Zygmund class. 83e:42008
Long, Rui Lin Sommes partielles de Fourier des fonctions bornées. (English summary)
[Partial sums of Fourier series of bounded functions] 83k:42004
Mejibro, Leif See Jurshoe, Ole G., 83k:42009
Prestini, Elena On the two proofs of pointwise convergence of Fourier series. 83k:42005
Stanojevic, Vera B. L¹-convergence of Fourier series with complex quasimonotone coefficients, 83i:42009

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Zaini, S. Zahid Ali See Ahmad, Z. U., 83h:42007

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Bloom, Walter R. Approximation theory on the compact solenoid. (83h:43007) Bojanic, R. (with Stanojević, Časlav V.) A class of L^1 -convergence. (83e:42004) Bray, William O. On a theorem of Stanojević. (83d:42012)

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Ch'en, Chao Ti Representation of functions of several variables defined on the torus.

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Khristov, V. Kh. (with Petrushev, P. P.) On Tauberian theorems for power series and their application to Fourier series. (83c-40001)

Marcus, Michael B. (with Pisier, Gilles) ★Random Fourier series with applications to harmonic analysis. (83b-60031)

Meaney, Christopher Unbounded Lebesgue constants on compact groups. (83d-43009)

Petrushev, P. P. See Khristov, V. Kh., (83c-40001)

Pisier, Gilles See Marcus, Michael B., (83k-60031)

Saakyan, A. A. Integral moduli of smoothness and Fourier coefficients of the superposition of functions. (Russian) (83c-42004)

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The divergence of Fourier series of superpositions of continuous functions. (Russian) (83æ42013) mojevic, Časlav V. Tauberian conditions for L¹-convergence of Fourier series. (83f-42005) See also Bojanic, R., (83æ42004)

42A24 Summability of Fourier and trigonometric series

Ahmed, Z. U. (with Mursaleen) F_A and A_B summability of a class of derived Fourier series. R3d:42008

(with Mursaleen) Invariant means and matrix summability of a class of conjugate Fourier series. 83):42010

Akhobudze, T. I. On some one-sided conditions for convergence and summability of Fourier series. (Russian. English and Georgian summaries) 83e:42009

Classes of functions and convergence of Fourier series. (Russian) 83le:42005

Arfin, Khurshidul See Saxena, Ashok; et al., 83e:42010

Dikshit, H. P. (with Kumar, Arun) Determination of bounds similar to the Lebesgue constants. 83e:42009

Guntum, L. P. On the Norland summability of a sequence of Fourier coefficients.

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Klas-12006 Gupta, R. R. The (R, e^{w^n}, r) (C, 1)-summability of a Fourier series. 83h:42012 Kumur, Arum Absolute total-effectiveness of a total effective (N, p_n) method. 83e:42007 See also Dikshit, H. P., 83d:42009 Mishra, K. N. On the summability of Fourier series by $(N, p_n^{(a)})$ method. (Hindi. English

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rsaleen See Ahmad, Z. U., 83d:42008 and 83j:42010

Patra, Brundaban On the absolute zero order summability of a Fourier series and its allied series. 83j-42011

akash, Ved On the ha amability of a sequence of Fourier coefficients. (Hindi. Prakash, Ved On the harmonic summability of a sequence of Fourier coefficient English summary) 83a42007

On [F,d_] summability of conjugate series of a Fourier series. (Hind summary) 83i-42006

Prasad, Rajendra See Saxena, Ashok; et al., 83e42010

Qureshi, Kutbuddin See Sharma, P. L., 83e42010

Saxena, Ashok (with Prasad, Rajendra; Arfin, Khurshidul) On the strong (L)

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nability of the (C, 1) mean of the derived series of the Fourier series. 83e:42010 Saxena, R. B. Euler summability of conjugate Fourier series. (Hindi. English summary) 83j:42012

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belonging to weighted $(L^{\prime},\psi(t))$ class. 83 \pm 3010 eng, Shu Yun A generalization of a theorem of S. N. Mukhopadhyay. (Chinese. English summary) 83 \pm 42003

Siddiqi, Jamil A. A criterion for the (e,c)-su nability of Fourier series. 83h:42013

Singh, K. N. See Tripathi, L. M., 83k:42010 Sklyarenko, V. A. Limits of indeterminacy of (C, k)-means of a trigonometric series and the H^k Cross integral. (Russian) 836-42006

ik, Vilmos Comparison of "uniform" and "almost everywhere" summability

Totik, Vilmos Comparison of "uniform" and "almost everywhere" summability properties. 83h:42014

Tripathi, L. M. (with Singh, K. N.) On the uniform Nörlund summability of Fourier

series and its conjugate series. 83x42010

Zhizhlashvili, L. V. Summability of multiple trigonometric Fourier series. (Russian. English and Georgian summaries) 83x42015

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Baskakov, V. A. On the order of approximation and the norms of linear summation methods for Fourier series. (83c:42003)

D'yachenko, M. I. On some conditions for local smoothness of functions. (Russian) (83h:42017)

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Towic, Miodrag Boundedness of the norms of trigonometric polynomials and their application to summability methods for Fourier series. (Russian) (83j:42001)

Lee, Cheng Ming On integrals and summable trigonometric series. (83b:26009)

Shi, Xian Liang Estimates of the degree of Fourier coefficients and their application to strong summability. (Chinese) (83b:42004)

Stepanets', O. I. *Pansouepinse приближения тригопометрическими полин (Russian) [Uniform approximation by trigonometric polynomials] (83k:42002)

Yadav, Sarjoo Prasad On multipliers for the absolute Nörlund summability. (83h:

42A28 Absolute convergence, absolute summability

Ahmed, Z. U. (with Rahiman, P. M. Abdul) Absolute summability of Fourier series by methods based on power series. 82a42008
andra, Prem Necessary and sufficient conditions for the absolute Euler summability.

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Gautam, L. P. On the absolute harmonic summability of Fourier series. 83b:42007 Leindler, László (with Schwinn, H.) Über die absolute Summierbarkeit der

Orthogonalreihen. [On the absolute summability of orthogonal series] 83:e42011

Mohapatra, Ram Narayan Absolute Cesàro summability of successively derived series of a Fourier series of functions of class L_p (p > 1). 83a:42010

Okuyama, Yasuo On the absolute summability factor of Fourier series. 83f:42006

Prakash, Ved On the absolute harmonic summability of a Fourier series. (Hindi. English

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Rahiman, P. M. Abdul See Ahmad, Z. U., 83a:42008 Schwinn, H. See Leindler, László, 83e:42011 Shiba, Masaaki On absolute convergence of Fourier series of function of class A-BV^(p). 834-42011

Sukla, Indui lata Absolute harmonic summability factors for conjugate series of a Fourier

Sunouchi, G. Absolute summability of Fourier series. 831:42007
Temlyakov, V. N. On absolute summation of Fourier series by subsequences. (Russian summary) 83i:42008

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Kahane, Jean-Pierre Homeomorphismes du cercle et séries de Fourier. [Homeomorphisms of the circle, and Fourier series] (83m:42004)

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Wang, Si Lei Some properties of the functions of A-bounded variation. (83k:26006)

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- 42B05 Fourier series and coefficients
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Torchinsky, A. See Kerman, R. A., 83k:42019 Troutman, John L. See Jurkat, W. B., 83c:42015

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Kokilashvili, V. M. On traces for weighted anisotropic Lizorkin-Triebel spaces.

López-Melero, B. See Córdoba, Antonio, (83g-42006)

Meyer, P.-A. Sur une inégalité de Stein. [On an inequality of Stein] (83j-60046)

Rodríguez-Salinas, Baltasar On the Hardy-Littlewood maximal operator and growth

properties. (Spanish. English summary) (83)-46045) Rubio de Francia, José Luis Boundedness of maximal functions and singular integrals in weighted L^p spaces. (83a:42018)

Sjögren, Peter On Hörmander-Mihlin multipliers and Littlewood-Paley decompositions. (B3c:42012)

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Weiss, Guido See Stein, Elias M.; et al., (83c-42017)

42B30 HP-spaces

Ibul Huy Qui Weighted Hardy spaces. 83h:42026 Chao, Jia Arng (with Gilbert, John E.; Tomas, Peter A.) Molecular decomposition. H**-theory. 83e:42016

H*-theory. 83e-42016

arcia-Cuerva, José **Operators in H*2*. (Spanish) (See 83k:00005b)

ilibert, John E. See Chno, Jin Arng; et al., 83e-42016

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icardello, Massimo A. See Mascerl, Glancarlo; et al., 83e-42026

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ingren, Peter A weak spectral synthesis property for Hardy and Lipschitz spaces.

83e-42021

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maximal operators on certain H^p classes. 83e:42017 bleson, Mitchell H. (with Weiss, Guido) The molecular characterization of certain

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H^p and BMO regular martingales. (83k:60045)

Fabes, Eugene B. Various notions of the Hardy space, H¹, of a C¹-domain. (83a:31011)

Janson, Svante Generalizations of Lipschitz spaces and an application to Hardy spaces and bounded mean oscillation. (83):46037)

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Krantz, Steven G. H^p(Rⁿ) is equidistributed with L^p(Rⁿ). (83a:46041)

Krotov, V. G. on the differentiability of functions from L^p, 0 < p < 1. (Russian)

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Miyachi, Atihiko On some singular Fourier multipliers. (83a:42017)

Pratelli, Maurizio Quelques remarques sur la topologie faible de l'espace de Hardy H¹.

(Italian summary) [Some remarks on the weak topology of the Hardy space H¹]

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Ricci, Fulvio (with Taibleson, Mitchell H.) Representation theorems for harmonic functions in mixed norm spaces on the half plane. (83b:31002)

Ryabogin, A. K. Integral inequalities for conjugate harmonic functions. (Russian) (83b:31003)

n, Mitchell H. See Ricci, Fulvio, (83b:31002)

Wang, Huai Ch'uan Growth of functions in HP. (83:42013)

42B99 None of the above, but in this section

Brown, Leon (with Kahane, Jean-Pierre) A note on the Pompeiu problem for convex domains. 83g:42013

Ch'en, Chao Ti (with Huang, Ying Lung) On the representation of measurable functions by multiple trigonometric series. 83b:42025 Representation of functions of several variables defined on the torus. 83m:42012

habor, B. I. Asymptotic behavior of multiple singular integrals for differentiable functions. (Russian) 83e:42028

Huang, Ying Lung See Ch'en, Chao Ti, 83b:42025
Kahane, Jean-Pierre See Brown, Leon, 83g:42013
Long, Rui Lin A note on a two-dimensional everywhere divergent Fourier expansion. (Chinese: English summary) 83c:42029
Musaev, B. I. (with Salaev, V. V.) Conjugate functions of several variables. II. (Russian) 83g:42014
Salaev, V. V. Conjugate functions of several variables.

Salsev, V. V. See Mussev, B. I., 83g:42014
Tomic, Milos On approximation by angle and some classes of functions. 83j:42020

secondary classifications:

Gatesoupe, Michel Problèmes de complémentation de sous-algèbre dans l'algèbre des séries de Fourier en deux variables absolument convergentes. (English summary) [Complementation problems of a subalgebra in the algebra of Fourier series in two absolutely convergent variables] (83m:46079)

Hedberg, Lars Inge Spectral synthesis in Sobolev spaces, and uniqueness of solutions of the Dirichlet problem. (83g:46032)

Jerison, David S. (with Kenig, Carlos E.) The logarithm of the Poisson kernel of a C¹ domain has vanishing mean oscillation. (83k:31004)

Kenig, Carlos E. See Jerison, David S., (83k:31004)

Kolesnik, G. On the estimation of multiple exponential sums. (83c:10056)

Madyck, W. R. Lipschitz spaces and mixed Lebesgue spaces. (83h:46043)

Stein, Elias M. The development of square functions in the work of A. Zygmund. (83b:42001)

42Cxx Nontrigonometric Fourier analysis

42C05 Orthogonal functions and polynomials, general theory [See also

Alfaro, M.º Pilar (with Vigil, Luis) On recurrence formulas for orthogonal polynomials on the unit circle. (Spanish) 83mr42013

Alfaro Garcia, Manuel See Marcellin Español, Francisco, 83m:42015
Al-Salam, W. A. (with Verma, Arun) On an orthogonal polynomial set. 83j:42021
Chihara, T. S. (with Nevai, Paul G.) Orthogonal polynomials and measures with finitely many point masses. 83i:42017

Spectral properties of orthogonal polynomials on unbo

Csernyák, L. (with Joé, I.) A new proof of a theorem of Szegő by a method of B'in. 83u-42021

Debesa, Jesús Sánchez On a Szegő's theorem of orthogonal polynomials. 83e:42030 Fadeev, N. P. (with Masterova, L. A.) Polynomial system of weight $\rho(k,x) = (1-x)^{-1/2}(1+x)^{1/2}(1-kx^2)^{-1}. \text{ (Russian) } 83d:42022$

Görlich, E. (with Markett, C.) A convolution structure for Laguerre series. 83g:42015

Cornell, E. Chernyik, L., Six-42021

Khazirishi, E. O. Some orthogonal systems of functions. (Russian) 83b:42026

Kowalski, M. A. The recursion formulas for orthogonal polynomials in n variables.

nality and recursion formulas for polynomials in n variables. 83j-42022b

László, Lajos Imaginary part bounds on polynomial zeros. 83t-42018

Leindler, László On the very strong approximation of orthogonal series. 83b:42027

Leonard, Douglas A. Orthogonal polynomials, duality and association schemes.

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rational equipotential curves. (Spanish. English summary) 83 ac 42016

Markett, C. See Gorlich, E., 83g-42015 Masterova, L. A. See Fadeev, N. P., 83d-42022 Maté, Attila (with Nevai, Paul G.) Remarks on E. A. Rakhmanov's paper: "The asymptotic behavior of the ratio of orthogonal polynomials" [Mat. Sb. (N.S.) 103(145) (1977), no. 2, 237–252; MR 56 #3556]. 83m:42017

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Moral Ledesma, Leandro See Marcellán Español, Francisco; et al., 83m:42016
Móricz, Ferenc A maximal inequality for multiple function series. 83k:42022
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Nevai, Paul G. See Chihara, T. S., 83:42017 and Máté, Attila, 83m:42017
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Pribegin, S. G. Absolute convergence of Fourier-Haar series. (Russian) 83b:42028
Rakhmanov, E. A. Asymptotic properties of polynomials that are orthogonal on the real axis. (Russian) 83a:42020

The asymptotic behavior of the ratio of orthogonal polynomials. II. (Russian)

See also Máté, Attilac et al., 83m:42017

Verma, Arun See Al-Salam, W. A., 83j:42021 Vigil, Luis See Alfaro, M. Pilar, 83m:42013

Walter, Gilbert G. See Zayed, Ahmed I., 83j:42023
Zayed, Ahmed I. (with Walter, Gilbert G.) Series of orthogonal polynomials as hyperfunctions. 83j:42023

secondary classifications:

Andriews'kii, V. V. Approximation of functions by partial sums of a series in Faber polynomials on continua with a nonzero local geometric characteristic. (Russian) (83c:30032)

Atkinson, F. V. (with Everitt, W. N.) Orthogonal polynomials which satisfy second order differential equations. (83j:33008)

Bhonsle, B. R. See Malave, Pushpa B., (83a:33015)
Chihara, T. S. Indeterminate symmetric moment problems. (83d:44007)

Approximants of exponential type general orthogonal polynomials. (83h:41021)

Everitt, W. N. See Atkinson, F. V., (83j:33008)

silver, Philip J. Moment systems and orthogonal polynomials in several variables. (83g:44011)

Gillis, J. (with Lewis, G.) Monic polynomials with minimal norm. (83c:41007)

nde, B. K. Bilateral generating functions in the unified form for classical orthogonal polynomials. (83k:33020) Krall, Allan M. The Bessel polynomia Lewis, G. See Gillis, J., (83c:41007)

ial moment problem. (83f:33006)

Littlejohn, Lance L. (with Shore, Samuel D.) Nonclassical orthogonal polynomials as solutions to second order differential equations. (83i:33006)

Madhekar, H. C. (with Thakare, Nimbakrishna) Biorthogonal polynomials suggested by the Jacobi polynomials. (83j:33009)

Malave, Pushpa B. (with Bhonsle, B. R.) Some recurrence relations and differential

formulae for two-variable orthogonal polynomials ${}_2P^n_{n,k}(x,y)$ which are orthogonal over the unit disk. I. (83a:33015)

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Mussas, Pierre Polynômes orthogonaux et itération des transformations quadratiques.

[Orthogonal polynomials and iteration of quadratic transformations] (83i:58072)

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polynomials. (cs.c.5.902.)

Shore, Samuel D. See Littlejohn, Lance L., (83i:33006)

Smith, Ronald An abundance of orthogonal polynomials. (83m:33023)

Srivastava, Hari M. Some recent contributions to the theory of the classical orthogonal polynomials. (83f:33011)

Tandori, Kárody Beitrag zur Konvergenz der Orthogonalreihen. [Contribution to the convergence of orthogonal series] (83a:40004)

Thakare, Nimbakrishna See Madhekar, H. C., (83j:33009)

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42C10 Fourier series in special orthogonal functions (Legendre polynomials, Walsh functions, etc.)

thehersyam, A. V. U(s)-sets of complete measure for the Walsh system. (Russian. English and Armenian summaries) 83h:42028 where B. K. (with Sindhi, D. S.) Absolute Cesaro summability of Laguerre series.

(Hindi. English summary) 83g-42016

undra, Prem (with Sharma, M. M.) On the |L|-summability of ultraspherical series.

Chanillo, S. On the weak behaviour of partial sums of Legendre series. 83h:42029 Ch'èn, Chao Ti A theorem of Kaczmarz on multiple generalized Walsh Fourier series.

nitriev, A. A. (with Semenov, E. M.) Operators of weak type (1, 1). (Russian) 83c:42019

Gadzhiev, A. D. Multipliers of Fourier series in spherical functions and properties of a multidimensional singular operator symbol. (Russian) 83k:42024

Gasper, George (with Trebels, Walter) A Hausdorff-Young type inequality and

altiplier conditions for Jacobi expansions. 83f:42017

Gevorkyan, G. G. Uniqueness sets for Haar and Walsh systems. (Russian. Armenian nary) 83m:42020

Görlich, E. (with Markett, C.) Projections with norms smaller than those of the

ultraspherical and Laguerre partial sums. 83:42024

G"merska, L. V. Divergent series with monotonically decreasing coefficients in orthonormalized systems of convergence. (Bulgarian. German and Russian summaries)

Gupta, S. K. See Mursaleen, 83ts 42830

Komissarov, A. A. Equivalence of Haar and Franklin systems in some spaces of functions. (Russian) 83m:42021

On the equivalence of the systems of Haar and Franklin in symmetric spaces. (Russian) 83i:42025

Lakhani, K. B. A note on absolute Ceshro summability of Laguerre series. (Hindi. English nary) 83g:42017

Lunina, M. A. On the set of points of absolute convergence of series in the Haar system. (Russian. English summary) 83j:42026

Markett, C. Norm estimates for Cesàro means of Laguerre expansions. 83f:42018 See also Görlich, E., 83j:42024

Morettin, Pedro A. Walsh spectral analysis. 83f:42019

Móricz, Ferenc Lebesgue functions and multiple function series. II. 83i:42019

Mursaleen (with Gupta, S. K.) Walsh functions and generalized almost convergence. R3b:42030

Pal, Jeno The eigenfunctions of the Walsh-Fourier transform. 83e:42020 Pandey, B. N. On the summability of Jacobi series by (N, q_n) -method. 83e:42031 Pandey, Diwakar On $|L|_k$ summability of ultraspherical series. 83a:42021

Prasad, Kanhaiya On the Nörlund summability of Legendre series. (Russian summary) 83m42022

Schipp, F. (with Simon, Péter) Investigation of Haar and Franklin series in Hardy spaces. (Russian summary) 83m:42022

nov, E. M. (with Stöckert, Bernd) Permutations of the Haar system in spaces L.

(Russian. English summary) 83f:42020 See also Dmitriev, A. A., 83c:42019 Shaginyan, L. A.: On the summability to $+\infty$ of series in the Haar system by the (C, 1) method. (Russian: English and Armenian summaries) 83:42020

Sharma, M. M. See Chandra, Prem, 83h:42029 Simon, Péter Remarks on the Vilenkin system. 83c:42021

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Skvortsov, V. A. Convergence in L_1 of Fourier series with respect to the Walsh-Kaczmarz system. (Russian. English summary) 83c42024

Stöckert, Bernd See Semenov, E. M., 83f-42020
Tabatatze, G. Z. On absolute convergence of Fourier-Haar series. (Russian. English and Georgian summaries) 83d-42025

Talalyan, A. A. On the connection between properties of completeness and uncondition

convergence for orthogonal systems. (Russian) 83e:42032 ndori, Kåroly Bemerkung zur Konvergenz der Teilreihen von Orthogonalreihen. [Remark on the convergence of subseries of orthogonal series] 83e:42033

Tateoka, J. On the localization property of the double Walsh-Fourier series. 83a:42023

Totik, Vilmos Strong approximation and the behaviour of Fourier series. 83g:42018
Trebels, Walter See Gasper, George, 83f:42017
Tsagareishvili, V. Sh. Fourier coefficients of a continuous function. (Russian. English and Georgian summaries) 83f:42016

Uryanov, P. L. Some results on series with respect to the Haar system. (Russian) 83d:42026

Yoneda, Kaoru Perfect sets of uniqueness on the group 2". 83h:42030
Zaderei, P. V. Approximation of functions of two variables by partial Fourier-Walsh sums. (Russian) 83k:42025
Zayed, Ahmed I. Laguerre series as boundary values. 83j:42027

secondary classifications:

Burkholder, D. L. A nonlinear partial differential equation and the unconditional constant of the Haar system in L^p . (83):60045)

Cazzaniga, Franco A local property of absolutely convergent ultraspherical series. (Italian summary) (83g:43008)

summary) (83g:43008)
Constantinescu, Lidia See Tomescu, F. M. G., (83k:94009)
Markett, C. Mean Cesaro summability of Laguerre expansions and norm estimates with shifted parameter. (Russian summary) (83j:40004)
Sharma, Sushil The absolute Cesaro summability of Legendre series. (83g:40013)

Sövegjártó, A. P.

regiarté, A. P. On the divergence of orthogonal series. (83a:40003)
vastava, Hari M. Certain dual series equations involving Jacobi polynomials. II.
(Italian summary) (836:45010)

Tevradze, V. L. Uniform convergence of Cesàro means of negative order of Fourier-Walsh series. (Russian. English and Georgian summaries) (R3e:48008)
Todorow, J. Die Analyse von Schaltfunktionen mit Hilfe der Rademacher-Walsh-Transformation und ihre Darstellung in der Schwelhvertalgebra. [The analysis of switching functions by means of the Rademacher-Walsh transform and their representation in threshold algebra] (R3ac:94030)
Tomesen, F. M. G. (wish Constantinescu, Lidia) Errors of power performance computation by Haar series expansions. (French and German summaries) (R3ac:94009)

42C15 Series of general orthogonal functions, generalized Fourier expansions, nonorthogonal expansions

Badkov, V. M. Approximation by Fourier expansion in terms of orthogonal polynos 83e:42022

gadze, V. M. Fourier-Haar coefficients. (Russian. English and Georgian summaries)

sadze, R. D. On the divergence of orthogonal Fourier series in the L metric. (Russian. English and Georgian summaries) 83k42032

G'mevika, L. V. The rate of approximation of functions by (C, a>0)-means of their orthogonal expansions. (Bulgarian. German and Russian summaries) 83j-42028 [Gulisashvili, A. B. On the convergence of orthogonal series in L^1 and almost everywhere. (Russian. English and Georgian summaries) 83b-42031 [Herrera, Ismael] (with Spence, David A.) Framework for biorthogonal Fourier series.

Leindler, Laszló On relations of coefficient-conditions. 83p42030

Manukyan, V. M. The Carleman singularity for functions that are continuous at least at one point. (Russian. English and Armenian summaries) 83j-42031

Mekwar, Josef Die Bedeutung der Christoffelichen Summenformel für die Entwicklung nach Orthogonalpolynomen. [The meaning of Christoffel's sum formula for expansions in orthogonal polynomials] 83k-42026

Neval, Paul G. See Walter, Gilbert G., 83d-42028

Palashebate S. N. On the unconditional convergence of orthogonal series. (Bussian)

Poleshchuk, S. N. On the unconditional convergence of orthogonal series. (Russian ary) 83d:42027

Richter, Wieland A short note about pointwise divergence of Jacobi expansion for continuous functions. 836-42021

Schipp, F. Maximal inequalities. 83:e42023
Schröck-Pauli, C. Verallgemeinerte Fourier-Entwicklungen ohne Gibbs'sches Phänomen am Rand. [Generalized Fourier expansions without Gibbs's phenomenon on the boundary] 83c:42024

Skvortsov, V. A. Ceshro means of Fourier series with respect to multiplicative systems. (Russian. English summary) 83k:42027

Spence, David A. See Herrera, Ismael, 83j-42029
Sralay, I. On the connection between the strong approximation and the generalized absolute Cesàro summability of orthogonal series. 83i-42021
Tandori, Károly Über die Lebesgueschen Funktionen. III. [On the Lebesgue functions.

III) 83e:42034

On the role of the Lebesgue functions in the convergence theory of functional series. 83c-42025

Über die Lebesgueschen Funktionen. IV. [On the Lebesgue functions. IV]

Über ein Problem von B. S. Kashin. [On a problem of B. S. Kashin] 83le:42833 Bemerkung über die unbedingte Konvergenz der Orthogonalreihen. [Remark on the unconditional convergence of orthogonal series] 83i:42022

Walter, Gilbert G. (with Nevai, Paul G.) Series of orthogonal polynomials as boundary values, 834-42028

secondary classifications:

Bure, V. M. (with Sedunov, E. V.) On the question of using interpolation cubature formulas for calculating Fourier coefficients. (Russian) (83c:41031)

Gadzhiev, A. D. Multipliers of Fourier series in spherical function ms and properties of a multidimensional singular operator symbol. (Russian) (83k:42024)

Joó, I. (with Lažetić, Nebojša) Estimate for the difference of the second derivative of

partial sums arising by nonnegative selfadjoint extensions of Sturm-Liouville operators. (83a:34026)

Lažetić, Nebojša See Joó, I., (83a:34026) van Rossum, Herman Formally biorthogonal polynomials. (83e:33011)

nov, E. V. See Bure, V. M., (83c:41031)

Talalyan, A. A. On the connection between properties of completeness and unconditional convergence for orthogonal systems. (Russian) (83e:42032)
Walter, Gilbert G. Orthogonal series estimators of the prior distribution. (83m:62070)

42C20 Rearrangements and other transformations of Fourier and other orthogonal series

secondary classifications:

Kiener, K. Faltungsungleichungen auf endlichen abelschen Gruppen. [Rearrangement inequalities on finite abelian groups] (83g:20053)
Poleshchuk, S. N. On the unconditional convergence of orthogonal series. (Russian

ry) (83d:42027)

Sacher, Vorum A new interpolation theorem. (836:46029)

42C25 Uniqueness and localization for orthogonal series secondary classifications:

Bakhshetsyan, A. V. $U(\epsilon)$ -sets of complete measure for the Walsh system. (Russian. English and Armenian summaries) (83h:42028)

- 42C30 Completeness of sets of functions
- Balikov, G. I. Polynomial bases in the space of infinitely differentiable functions on an interval. (Russian) 83c-42026

- Takshasi, Sin-ed (with Takeuchi, Mamoru) A note on completeness of real-valued functions (\$\psi^*\nu\): \$p=1,2,\dots\). \$3ds42029

 Taksuchi, Mamoru See Takshasi, Sin-ei, 83ds42029

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 Zailk, R. A. The Müntz-Szász theorem and the closure of translates. 83is42023

- Chanturiya, Z. A. On unconditional polynomial bases of the space L_p . (83e:46022) Gasper, George Orthogonality of certain functions with respect to complex valued weights. (83a:33014)
- Weignts. (836:33014)

 Fin, V. A. Necessary and sufficient conditions for spatial decompositions to be bases and to be equiconvergent with a trigonometric series. I. (Russian) (83c:34032a)

 Necessary and sufficient conditions for spatial decompositions to be bases and to be equiconvergent with a trigonometric series. II. (Russian) (83c:34032b)

 Moiseev, E. I. Asymptotic mean value formula for the regular solution of a differential equation. (Russian) (83c:34032b)
- ssell, David L. On exponential bases for the Sobolev spaces over an interval.
- (33g-46315)

 Schröck-Paull, C. ★Exponentialentwicklungen nach dem Nullstellensystem gewisser ganzer Funktionen. (German) (Exponential expansions based on the system of zeros of certain entire functions) (83d-30008)
- 42C99 None of the above, but in this section
- Beohar, B. K. (with Jadiya, B. L.) Degree of approximation by Nörlund means of the Fourier-Laguerre expansion. 83e:42036

 Gautschi, Walter An algorithmic implementation of the generalized Christoffel theorem.
- (See 83k:65003)
- Jadiya, B. L. See Beohar, B. K., 83e:42036

dary classification

- Goffman, Casper (with Liu, Fèng Chè; Zink, R. E.) Representation of measurable functions by multiple series. (830:46042)

 Lau, Ka Sing On some classes of Banach spaces and generalized harmonic analysis. (830:46036)

- On the Banach spaces of functions with bounded upper means. (83b:46037)
 Liu, Fèng Chè See Goffman, Casper; et al., (83b:46042)
 Rubinshtein, A. I. See Timan, M. F., (83e:43012)
 Timan, M. F. (with Rubinshtein, A. I.) Imbedding of classes of functions that are de ng of classes of functions that are defined on zero-dimensional groups. (Russian) (83e:43012)

 Wade, William R. (with Yoneda, Kaoru) Uniqueness and quasimeasures on the group of

- wase, william R. (with Yoneus, Kaoru) Uniqueness and quasimeasures on unintegers of a p-series field. (83c-43016)

 Yoneda, Kaoru Riemann-Lebesgue theorem. (Russian summary) (83c-42005)

 See also Wade, William R. (83c-43010)

 Zink, R. E. See Goffman, Casper; et al. (83b-46042)

 Zotlkov, S. V. Approximation of continuous and monotone functions by their Fourier-Haar integrals. (Russian) (83j-41025)

43-XX ABSTRACT HARMONIC ANALYSIS (For other analysis on topological and Lie groups, see 22Exx.)

43-01 Elementary exposition, textbooks

secondary classifications

- Gvishiani, A. D. See Kirillov, A. A., (83h:46003)

 Kirillov, A. A. (with Gvishiani, A. D.) ★Theorems and problems in functional analysis.
- likiwin, P. ★Intégration et probabilités. Analyse de Fourier et analyse spectrale. (French) [Integration and probabilities. Fourier analysis and spectral analysis] (831:28001)
- (McFaden, Harold H.) See Kirillov, A. A.; et al., (83h:46003)
 - 43-02 Advanced exposition (research surveys, monographs, etc.)
- 43-03 Historical (must also be assigned at least one classification number
- 43-04 Explicit machine computation and programs (not the theory of computation or programming)
- 43-06 Proceedings, conferences, etc.

secondary classifications:

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 - 43A07 Means on groups, semigroups, etc.
- Day, Mahlon Marsh Left thick to left lumpy-a guided tour. 83k:43002
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Travaglini, Giancarlo See Giulini, Saverio; et al., (83f:22000)

43A55 Summability methods on groups, semigroups, etc. [See also 40J05.] secondary classifications:

Meaney, Christopher Unbounded Lebesgue constants on compact groups. (83d:43009)

43A60 Almost periodic functions on groups and semigroups and their generalizations (recurrent functions, distal functions, etc.); almost automorphic functions

Crombez, G. Convolutions and factorization theorems for spaces of weakly almost periodic functions. 83e:43010

Hansel, Georges (with Troallic, Jean-Pierre) Suites uniformément distribuées et fonctions faiblement presque-périodiques. (English summary) [Uniformly distributed sequences and weakly almost periodic functions] 834:43010

Milnes, Paul Almost periodic functions on semitopological semigroups. 83m:43009

Troallic, Jean-Pierre See Hansel, Georges, 83d:43010

secondary classifications

Belley, J.-M. An ergodic theorem in harmonic analysis. (83b:47009)

Crombez, G. Almost periodic pseudomeasures and compact multiplication operators. (83c:43005)

Glicksberg, Irving Maps preserving translates of a function. (83b:43003) Mauchire, J.-L. Suites limite-périodiques et théorie des nombres. IV. [Limit-periodic sequences and number theory. IV] (83e:10067a)

Suites limite-périodiques et théorie des nombres. V. [Limit-periodic sequences and mamber theory. V] (83e:10067b)

Suites limite-periodiques et théorie des nombres. VI. [Limit-periodic sequences and number theory. VI] (83e:10067e)
Mendès France, Michel (with Van der Poorten, Alfred J.) Arithmetic and analytic properties of paper folding sequences (83b:10040)
Poppe, Harry (with Stärk, Andreas) Remarks on compactness in the space of almost

periodic functions. (83):46048)

periodic functions. (83):e6048)
Schwarz, Wolfgang Fourier-Ramanujan-Entwicklungen zahlen-theoretischer Funktionen
und Anwendungen. [Fourier-Ramanujan expansions of number-theoretic functions
and applications] (83a:10081b)
Stark, Andreas See Poppe, Harry, (83):46048)
Van der Poorten, Alfred J. See Mendes France, Michel, (83b:10040)
Wolf, Joseph A. Representations of reductive and parabolic groups. (83e:22018)

43A65 Representations of groups, semigroups, etc. [See also 22Dxx.]

Irving, Ronald S. Irreducible *-representations of some group rings and associated Banach *-algebras. 836:63011

secondary classifications:

D'Antoni, Claudio Functional calculus and representations of locally compact abelian

groups (83:ex7016)

Helmer, Dietrich Continuity of semigroup actions. (83:ex2002)

Kaniuth, Eberhard Weak containment and tensor products of group representations. (R31-22013)

Knapp, A. W. (with Speh, Birgit) Status of classification of irreducible unitary representations. (83h:22027)

Speh, Birgit See Knapp, A. W., (R3h:22027)

43A70 Analysis on specific locally compact abelian groups [See also

Bloom, Walter R. Approximation theory on the compact solenoid. 83h:43097 Cazzaniga, Franco A local property of absolutely convergent ultraspherical series. (Italian summary) 83g:43008 Giulini, Saverio (with Soardi, Paolo Maurizio; Travaglini, Giancarlo) Norms of

characters and Fourier series on compact Lie groups. 83j-43009

Hewitt, Edwin (with Ritter, Gunter) Fourier series on certain solenoids. 83h-43008

Lambert, P. V. On the minimum norm property of the Fourier projection in L^1 -spaces.

Ombe, H. (with Onneweer, C. W.) Bessel potential spaces and generalized Lipschitz spaces on local fields. 83e:43011 Onneweer, C. W. See Ombe, H., 83e:43011

Ritter, Gunter See Hewitt, Edwin, 83h:43008
Schumacher, Robert On the uniqueness property of minimal projectors. 83j:43011
Soardi, Paolo Maurizio See Giulini, Saverio; et al., 83j:43009
Travaglini, Giancarlo See Giulini, Saverio; et al., 83j:43009

secondary classifications:

Chao, Jia Arng (with Janson, Svante) A note on H¹ q-martingales. (R3k:60050)

Janson, Svante See Chao, Jia Arng. (R3k:60050)

Matsumoto, Shigeki Orbital decomposition and Fourier transform of invariant distributions on SL(2, F). (R3m:22020)

ako, Peter A. Invariant tempered distributions on the reductive p-adic group GL_n(F_p). (83h:22033)

v, R. R. Harmonic analysis on p-adic Lie groups. (Russian) (83k:22027)

43A75 Analysis on specific compact groups

Gatesoupe, Michel (with Meyer, Yves) Quelques propriétés de l'algèbre de Fourier du groupe des entiers dyadiques. [Some properties of the Fourier algebra of the group of dyadic integers] 83h:43009

Kitada, Toshiyuki On lacunary sets for totally disconnected compact groups. 83e:43011 Meyer, Yves See Gatesoupe, Michel, 83b:43009 Quek, T. S. (with Yap, Leonard Y. H.) Factorization of Lipschitz functions and absolute

convergence of Vilenkin-Fourier series. 83c:43012
Rubinshtein, A. I. See Timan, M. F., 83c:43012
Timan, M. F. (with Rubinshtein, A. I.) Imbedding of classes of functions that are defined

on zero-dimensional groups. (Russian) 83e:43012 Yap, Leonard Y. H. Ser Quek, T. S., 83e:43012

secondary classifications:

Quek, T. S. (with Yap, Leonard Y. H.) Multipliers from one Lipschitz space to another.

Semenov, E. M. (with Stöckert, Bernd) Permutations of the Haar system in spaces L_p. (Russian. English summary) (831:42020)
Stöckert, Bernd See Semenov, E. M., (831:42020)
Yap, Leonard Y. H. See Quel, T. S., (83e:43007)

eda, Kaoru Perfect sets of uniqueness on the group 2". (83h:42036)

43A77 Analysis on general compact groups

secondary classifications:

omare, Francesco Quelques remarques sur les ensembles de Korovkin dans les espaces des fonctions continues complexes. [Some remarks on Korovkin sets in spaces of complex continuous functions] (83):41026)

43A80 Analysis on other specific Lie groups [See also 22E30.]

Felix, Rainer Das Syntheseproblem für invariante Distributionen. [The synthesis problem for invariant distributions] 83f:43010
Schempp, Walter Cardinal splines and nilpotent harmonic analysis. 83b:43012

secondary classifications:

Bopp, Nicole Distributions de type K-positif sur l'espace tangent. (English summary)

[K-positive distributions on a tangent space] (83e:22011)

Champetier, C. (with Delorme, P.) Sur les représentations des groupes de déplacements de Cartan. [On the representations of the groups of displacement of Cartan]

(83e:22012)

group. I. (83c 50081a)

The Dirichlet problem for the Kohn Laplacian on the Heisenberg group. II. (83e-9

uroe, Takeshi An analogue of Paley-Wiener theorem on a real rank 2 semisimple Lie

Kawaroe, Takeshi An anatogue of rans)
group. (834:22009)
Lipsman, Ronald L. (with Wolf, Joseph A.) Canonical semi-invariants and the Plancherel
formula for parabolic groups. (838:22026)
Lohoue, Noël Sur les représentations uniformément bornées et le théorème de
convolution de Kunze-Stein. (Uniformly bounded representations and the
Kunze-Stein convolution theorem] (838:22028)

Melin, Anders Parametrix constructions for some classes of right-invariant differential operators on the Heisenberg group. (83a:35023)

Rothschild, L. P. See Corwin, Lawrence J., (83b:22010)

Wolf, Joseph A. Representations of reductive groups over local fields. (83b:22023)
Wolf, Joseph A. Representations of reductive and parabolic groups. (83e:22018)

See also Lipsman, Ronald L., (83b:22026)

43A85 Analysis on homogeneous spaces

renstein, Carlos A. (with Zalcman, Lawrence) Pompeiu's problem on symmetric spaces. 836-63012

Cygan, Jacek A tangential convergence for bounded harmonic functions on a rank one symmetric space. 83h-43010

symmetric space. 83h:43010
Gel'fand, I. M. (with Gindikin, S. G.; Graev, M. I.) Problems of integral geometry in an affine space con ected with integration of functions along planes. (Russian. English summary) 83f:43011

(with Gindikin, S. G.; Graev, M. I.) A problem of integral geometry in RP*, connected with integration of differential forms. (Russian) 83a:43006
Integral geometry and admissible complexes. (Russian) (See 83k:46004)
dikin, S. G. See Gelfland, I. M.; et al., 83a:43006 and

Graev, M. I. See Gel'fand, I. M.; et al., 83a:43006 and 83f:43011 Helgason, Sigurdur *The Radon transform. 83f:43012 *Topics in harmonic analysis on homogeneous spaces. 83g:

pics in harmonic analysis on homogeneous spaces. 83g-43009

(with Vági, S.) Group theoretic remarks on Riesz systems on balls. Korinyi, Ad 83b:43011

Lax, Peter D. (with Phillips, Ralph S.) A local Paley-Wiener theorem for the Radon transform in real hyperbolic spaces. 83:43015

(with Phillips, Ralph S.) A local Paley-Wiener theorem for the Radon transform

of L_2 functions in a non-Euclidean setting. 83:43016 equisud, Jean-Claude Polynômes tensoriels associés à la fonction hypergéométrique et applications. (English summary) [Tensor polynomials associated with the applications. (English summary) [Tensor polynomials associated with the hypergeometric function: applications; 83m:43010 https://doi.org/10.1001/j.med.2010.00010.

ov, L. P. Some integral transformations in φ-Euclidean spaces. (Russian) 83h-43012

Shifrin, M. A. Nonlocal inversion formulas in a problem of integral geometry for a pair of Grassmann manifolds. (Russian) 83a:43007

Sjögren, Peter Characterizations of Poisson integrals on symmetric spaces. 83m:43011 Vági, S. See Korányi, Adam, 83h:43011

man, Lawrence See Berenstein, Carlos A., 83d:43012

Zhong, Jia Qing Dimensions of the ring of invariant operators on bounded homogeneous domains. (Chinese. English summary) 83b:43013

secondary classifications

Auslander, L. (with Tolimieri, R.; Winograd, S.) Hecke's theorem in quadratic reciprocity, finite nilpotent groups and the Cooley-Tukey algorithm. (83m:12003)

Berline, Nicole (with Vergne, Michèle) Équations de Hua et noyau de Poisson. [Hua

equations and Poisson kernel] (83k:22019)

Carroll, Robert Wayne A survey of some recent results in transmutation. (83k:47014)

Some remarks on singular pseudodifferential operators. (83a:35106)

(with Gilbert, John E.) Some remarks on transmutation, scattering theory, and

special functions. (83h:58096)

Clerc, Jean-Louis On the asymptotic behaviour of generalized Bessel functions. (83c:58078)

E3-Jaouhari, Noureddine Théorème de Fatou pour les fonctions propres des opérateurs différentiels invariants par un groupe de déplacements de Cartan. (English summary)
[The fatou theorem for eigenfunctions of différential operators invariant under a

[The fatou theorem for eigenfunctions of differential operators invariant under a Cartan motion group] (83k:22024)

Gilbert, John E. See Carroll, Robert Wayne, (83h:58096)

Gindlikin, S. G. (with Khenkin, G. M.) The Penrose transform and complex integral geometry. (Russian) (83h:23027)

Gulllemin, Victor Band asymptotics in two dimensions. (83h:58015)

Helgason, Sigurdur The X-ray transform on a symmetric space. (83a:53048)

Helmesaux, Marc (with Pilati, Martin; Teitelboim, Claudio) Explicit solution for the zero signature (strong-coupling) limit of the propagation amplitude in quantum gravity. (83h:63026)

on, Kenneth D. On a ring of invariant polynomials on a Hermitian symmetric space. (83e:22019) enkin, G. M. See Gindikin, S. G., (83a:32027)

Korianyi, Adam (with Taylor, John Christopher) Fine convergence and admissible convergence for symmetric spaces of rank one. (83g:32032)

Lassalle, Michel Transformées de Poisson, algèbres de Jordan et équations de Hua. (English summary) [Poisson transforms, Jordan algebras and Hua equations] (English sum (83g:32033)

mg, Rui Lin Weighted large sieve inequalities in compact groups and homogeneo spaces. (Chinese) (83d:10055)

The weighted large sieve inequalities on compact groups and some homogeneo spaces. (83d:10056)

Matsumoto, Shuichi Discrete series for an affine symmetric space. (83::23016)
Mayer-Lindenberg, Fritz Zur Dualitätstheorie symmetrischer Paare. [On the duality theory of symmetric pairs] (80e22009)

Molchanov, V. F. The Plancherel formula for the tangent bundle of a projective space.

(Russian) (83a:22013)

aic functions on the

(Netuka, Ivan) See Zakeman, Lawrence, (83f:53052)
Ouyang, Cai Heng The operator Δ²_K + π²T² and pluriharmonic
Heisenberg group. (Chinese. English summary) (83i:35051)
Pilati, Martin See Henneaux, Marc; et al., (83i:63026)
Reimann, H. M. A rotation invariant differential equation for

Taylor, John Christopher See Korinyi, Adam, (83g.32032)
Teitelhoim, Claudio See Henneaux, Marc; et al., (83h:83026)
Tolimieri, R. See Auslander, L.; et al., (83h:12003)
Trione, Susana Elena On the Fourier transforms of retarded Lorentz-invariant functions. (83e:42014)

Tröger, Gu If On a decomposition of distributions generated by the rotation group. Tröger, Gundolf On a decomposition of distributio (See 83s:46004) Vergue, Michèle See Berline, Nicole, (83h:22019) (Vesely, Jiří) See Zalcman, Lawrence, (83h:53052) Winograd, S. See Auslander, L.; et al., (83m:12003)

Zaleman, Lawrence Offocat integral geometry. (Czech) (83f:53052)
 Zhong, Jia Qing On prime ideals of the ring of differential operators. (Chinese. English summary) (83b:32030)

43A90 Spherical functions [See also 22E45, 22E46.]

Hoogenboom, Bob Spherical functions and invariant differential operators on complex Grassmann manifolds. 83m:43012

Cazzaniga, Franco A local property of absolutely convergent ultraspherical series. (Italian summary) (83g-43008)
millo, S. On the weak behaviour of partial sums of Legendre series. (83b:42029)

Channio, S. On the weak behaviour of partial sums of Legendre series. (8304-2028)
Duistermant, Hans Asymptotics of elementary spherical functions. (8312-2013)
Duistermant, J. J. Asymptotics of elementary spherical functions. (831:58114)
Figh-Talamanca, Alessandro (with Picardello, Massimo A.) Spherical functions and harmonic analysis on free groups. (830-22018)
Fornari, Susana See Paczka, Sofia, (83c:22017)

Heyer, Herbert An application of the method of moments to the central limit theorem on hyperbolic spaces. (83k:60017)

Hoogenboom, Bob *Spherical functions and differential operators on complex

Hoogenboom, Bob \bigstar Spherical functions and differential operators on compact Grassmann manifolds. (83g:22010)
Ol'shanskii, G. I. Spherical functions and characters on the group $U(\infty)^X$. (Russian)

(83k:22040)

Paczka, Sofia (with Fornari, Susana) Determination of the irreducible spherical

functions of the pair (SU(2),SO(2)). (Spanish) (83c:22017)

Picardello, Massimo A. See Figà-Talamanca, Alessandro, (83m:22018)

Richards, Donald St. P. Differential operators associated with zonal polynomials. I, II.

(83i:62125)

Shustov, A. P. See Smirnov, Yu. F., (83g:81121)
Smirnov, Yu. F. (with Shustov, A. P.) The dynamical group of a relativistic oscillator and the properties of spherical functions on hyperboloids. (83g:81121)

radarajan, V. S. Some remarks on spherical functions on real semisimple Lie groups. (83m:22019) m Tensor spherical harmonics. (83e:22027)

43A95 Categorical methods [See also 18-XX, 46Mxx.]

43A99 Miscellaneous topics

secondary classifications

iss, K. C. Characters and contact transformations. (83e:81035) Laub, Jesper A singular convolution kernel without pseudoperiods. (83i:31010)

44-XX INTEGRAL TRANSFORMS, OPERATIONAL CALCULUS {For fractional derivatives and integrals, see 26A33. For numerical methods, see 65R10.)

44-01 Elementary exposition, textbooks

Oslowski, Jerzy *Zarys rachunku operatorowego. (Polish) [An outline of operator calculus] 83g:44001

secondary classifications:

Amerio, Luigi ★Analisi matematica con elementi di analisi funzionale. Vol. III. (Italian)
[Mathematical analysis with elements of functional analysis. Vol. III] (82e:00001) Jones, Douglas Samuel ★The theory of generalised functions. (83k-46035) Kiselev, A. I. See Krasnov, M. L.; et al., (83i:00007)

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- Krasnov, M. L. (with Kiselev, A. I.; Makarenko, G. I.) *Функции ком переменного. Операционное исчисление. Теории устойчиности. (Russian) [Functions of a complex variable. Operational calculus. Stability theory] (83:60007) nko, G. I. See Krasnov, M. L.; et al., (83:00007)
 - 44-02 Advanced exposition (research surveys, monographs, etc.)
 - 44-03 Historical (must also be assigned at least one classification number from Section 01)

Deakin, Michael A. B. The development of the Laplace transform, 1737–1937. I. Euler to Spitzer, 1737–1880. (83b:01029)
 (Euler, Loonhard) See Deakin, Michael A. B., (83b:01029)
 (Spitzer, S.) See Deakin, Michael A. B., (83b:01029)

- 44-04 Explicit machine computation and programs (not the theory of computation or programming)
- 44-06 Proceedings, conferences, etc.
- 44A05 General transforms [See also 42A38.]
- Cormack, A. M. The Radon transform on a family of curves in the plane. 83b:44001 Glasske, H.-J. On a class of integral transformations. (See 83k:46004)

 Khandelwal, R. S. (with Ravindra) Relation between integral transforms. (Hindi. English
- ary) 83k:44

Natterer, Frank. A Sobolev space analysis of picture reconstruction. 83e:44001
Pati, R. See Prasad, Y. N., 83b:44002
Prasad, Y. N. (with Pati, R.) Some theorems on the modified multidimensional integral

Prasad, Y. N. (win Fad, K.) Some meorems on the mounted muticamentional integral transform. (Turkish summary) 83b:44002
Ravindra See Khandelwal, R. S., 83b:44001
Synnatzschke, Jürgen Zu einer Eigenschaft gewisser Integraltransformationen. [On a property of certain integral transforms] 83g:44002

Triebel, Hans A remark on integral operators from the standpoint of Fourier analysis. 83g:44003

secondary classifications:

Feigin, L. A. (with Shmidt, P. V.; Shchedrin, B. M.) Recovery of the density of a spherically symmetric particle from its self-convolution. (83d:65334)
Helgason, Sigurdur The X-ray transform on a symmetric space. (83e:53048)
Lax, Peter D. (with Phillips, Ralph S.) A local Paley-Wiener theorem for the Radon transform of L₂ functions in a non-Euclidean setting. (83i:43016)

transform of L₂ functions in a non-Euclidean setting. (836-83016)

Norikov, V. S. Finite integral transforms for heat and mass transfer problems in nonstationary and inhomogeneous media. (836-83011)

Phillips, Ralph S. See Lax, Peter D., (836-63036)

Shchedrin, B. M. See Feigin, L. A.; et al., (836-65334)

Shmidt, P. V. See Feigin, L. A.; et al., (836-65334)

Zahn, Werseer Eugen Integral transforms and the symmetry group of the harmonic oscillator, SU₃, as a tool for resonating group calculations. (836-881100)

Zaleman, Lawrence Uniqueness and nonuniqueness for the Radon transform. (83h:42020)

Zayed, Ahmed I. Asymptotic expansions of some integral transforms by using generalized functions. (83he41033)

44A10 Laplace transform

Bose, S. K. (with Nath, Ram) A study of space of certain class of Laplace transforms. 83h:44001

Dahiya, R. S. Calculation of two-dimensional Laplace transform pairs. I. 83h:44002
Davison, S. G. (with Glasser, M. L.) Laplace transforms of Airy functions. 83m:44001
Glasser, M. L. See Davison, S. G., 83m:44001
Gluta, K. C. A study of the double Laplace transform. (Spanish summary) 83a:44001
Hukuhara, Masuo The Laplace transform as a transform between function families. (Japanese) 83g:44004

Libert, J. Transformées de Laplace inverses de $e^{(a^{1/2}p + \frac{1}{4}a^{-1/2}b)^2}i^t$ Transformers de Lapiace inverses de l' $Erl(a(a^{1/2}p + \frac{1}{2}a^{-1/2}b)/(p + a)^m(p + \beta)^n$, $e^{bp}E_l[a(p + c)]/(p + \alpha)^m(p + \beta)^n$ et applications. (English summary) [Inverse Laplace transforms of $e^{(a^{1/2}p + \frac{1}{2}a^{-1/2}b)^2}$ i' $Erlc(a^{1/2}p + \frac{1}{2}a^{-1/2}b)/(p + \alpha)^m(p + \beta)m$, $e^{bp}E_l[a(p + c)]/(p + \alpha)^m(p + \beta)^n$ and

applications] 83a:44002 See also , 83a:44002

- Mel'nik, V. I. Tauberian theorems with a remainder for the Laplace transform on the line. (Russian) 83k:44002
- Mohr, Ernst Über zwei von G. Doetsch gestellte Fragen aus der Theorie der Laplace-Transformation. (Italian summary) [On two problems in the theory of Laplace transforms, posed by G. Doetsch 30g-44005

 Nath, Ram See Bose, S. K., 83h-44001

 Rao, G. L. N. A unification of generalizations of the Laplace transform and generalized

- functions. (See 83k:46004)
- Ryabov, V. M. The Laplace transform inversion method, using the transform's values on the real axis. (Russian. English summary) 83h:44003
 Sevarta, K. S. Some theorem on Laplace transform. (Hindi. English summary) 83h:44004

Sids, Arram The Padé table and its connection with some weak exponential function approximations to Laplace transform inversion. 83c-44002
Stadtmiller, U. A refined Tauberian theorem for Laplace transforms in dimension d>1.
83t-44005

Tiwari, A. K. The distribution generalized Laplace transform. 83b:44003

Zimov'ev, Yu. M. Inversion formulas for the Laplace transform. (Russian) (Sec. 83k:46004)

secondary classifications:

Amerhaev, V. M. (with Utembaev, N. A.) Analysis of numerical algorithms for reconstruction of the original from the Laplace transform by means of Laguerre series. (Russian) (See 83k:46004)

asubramanian, R. (with Ramachandra, K.) Some problems of analytic number theory. II. (83h:10083)

deer, Werner Growth estimates for the coefficients of generalized formal solutions, and representation of solutions using Laplace integrals and factorial series. (83g;34006) ardway, K. K. Generalized testing for n-dimensional integral transformations. (83d;46049)

Brychkov, Yu. A. (with Prudnikov, A. P.) Several new operational calculus formulas.

Buschman, R. G. H-function transformation chains. (83£:33603)

Chizhenko, A. L. (with Suchik, V. E.) A modification of the decomposition theorem for the case of multiple poles. (Russian. English summary) (83:e65273)

Detweller, Eghert The Laplace transform of measures on the cone of a vector lattice. (83a:46056)

- Diamessis, J. E. See Therapos, C. P., (83g:65117)

 Dimitrov, H. D. On the order of a definite class of nonpolynomial differential operators. (83e:34018)
- (83&40006)
 Ghahramani, F. Endomorphisms of L¹(R⁺). (83g-46047)
 Gupta, K. C. On integral transforms. (83g-44007)
 Huang, Ch² (with Shih, Yen Ping) Laguerre operational matrices for fractional calculus

and applications. (82-26007)
ntsch, Lothar Zur Lösung des linksseitigen Anfangswertproblems bei Systemen
gewöhnlicher linearer Differentialgleichungen mit konstanten Koeftzienten (Existenz
und Eindeutgkeit, Approximation durch Lösungen singulär gestörter Systeme).
(English and Russian summaries) [On the solution of the left-nide initial value problem for systems of ordinary linear differential equations with constant coefficients (existence and uniqueness, approximation by solutions of singularly perturbed systems) (83f:34016)

systems] (831:54016)
Kushwaha, R. S. See Saxena, Ram Kishore, (83g:62032)
Luzan, A. I. See Slesarenko, A. P., (83g:35018)
Maravall Casesnoves, Dario Exact solutions of the integral equations of rheology and of viscoelasticity and their physical consequences. (Spanish) (83d:73035)

Martin-Löf, Anders A Laplace approximation for sums of independent random variables. (83c:60054)

(SDC000054)
Prudnikov, A. P. See Brychkov, Yu. A., (R3j:44005)
Ramachandra, K. See Balasubramanian, R., (R3k:10063)
Ryabov, V. M. Polynomials that arise from the numerical inversion of the Laplace transform. (Russian) (834:65339)

Saxena, Ram Kishore (with Kushwaha, R. S.) Applications of Laplace transform in

statistical distributions. (83g:62032)
Schempp, Walter Cardinal exponential splines and Laplace transform. (83i:41016a) A contour integral representation of Euler-Frobenius polynomials. (836-41016b) Cardinal logarithmic splines and Mellin transform. (836-41016e)

On cardinal exponential splines of higher order. (83:410166)

ubert, G. U. Inversion der hyperbolischen Kepler-Gleichung mittels

Laplace-Transformation. [Inversion of the hyperbolic Kepler equation using the Laplace transform] (83h:70012)

Shih, Yen P'ing See Huang, Ch'i, (83c:26007) Sinha, Sushil Kumar Behaviour of an analytic function represented by the generalized Laplace-Stieltjes integral. (83h:44011)

Espiner-Sucress integral. (assessed in particular and the operational-structural method of solution in nonstationary heat-conduction problems for regions of complicated shape. (83g:35018)

Sommen, F. Hypercomplex Fourier and Laplace transforms. I. (83g:46041)

Suchik, V. E. See Chizhenko, A. L., (83c:65273)

rempos, C. P. (with Diamessis, J. E.) Numerical inversion of a class of Laplace transforms. (83g:65117)

Utembaev, N. A. See Amerbaev, V. M., (See 83k:46004)
Viethauer, P. Operatorenrechnung nach Mikusiński—nicht statt, sondern neben der
Laplace-Transformation. [Operational calculus according to Mikusiński—not in place
of but side by side with the Laplace transform] (83m:4011)

Volkov, Yu. I. Approximating operators that are generated by nonnegative measures. (Russian) (836:41016)

44A15 Special transforms (Legendre, Hilbert, etc.)

Adams, Ernst On weighted norm inequalities for the Hilbert transform of functions with mts zero. 83m:44002

Barrett, Harrison H. Dipole-sheet transform. 83j:44001
Bartoshevich, M. A. See Prudnikov, A. P., (See 83k:46004)
Belevitch, Vitold (with Boersma, J.) On Stieltjes integral transforms involving

\(\Gamma\).

Boersma, J. See Belevitch, Vitals, 83d:44001

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dier, Eberhard *Voriesungen über nichtlineare Funktionalanalysis. II. (German)
[Lectures on nonlinear functional analysis. II] (83f:47038)

45-02 Advanced exposition (research surveys, monographs, etc.)

Fenyô, Istvan (with Stolle, H.-W.) *Theorie und Praxis der linearen Integralgleichungen. Fenyó, István (with Stolle, H.-W.) *Theorie und Fraxis der linearen Integralgleichungen.

1. (German) [Theory and application of linear integral equations. 1] \$3i:45002a (with Stolle, H.-W.) *Theorie und Fraxis der linearen Integralgleichungen. 1. (German) [Theory and application of linear integral equations. 1] \$3i:45002b Jörgens, Konrad *Linear integral operators. 83j:45001

Kagiwada, H. (with Kalaba, Robert) Imbedding methods for integral equations with applications. 83b:45001

Kalaba, Robert See Kagiwada, H., 83b:45001

Stolle, H.-W. See Fenyő, István, 83i:45002

secondary classifications:

Santy, Thomas L. *Modern nonlinear equations. (83e:00007)

45-03 Historical (must also be assigned at least one classification number

Lonseth, A. T. Sources and applications of integral equations. (Chinese) 836:45001
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 (Lû, Hui Fang) See Lonseth, A. T., 836:45001 and 836:45002

secondary classifications:

(Filatov, A. N.) See Il'yushin, A. A.; et al., (83c:01050)
Il'yushin, A. A. (with Imanaliev, M. I.; Matveev, N. M.; Mitropol'skii, Yu. A.)
Aleksandr Nikolaevich Filatov (on the occasion of his fiftieth birthday). (Russian) (83c:01050)

Imanaliev, M. I. See ll'yushin, A. A.; et al., (83c-01050) Matveev, N. M. See ll'yushin, A. A.; et al., (83c-01050) Mitropol'skii, Yu. A. See ll'yushin, A. A.; et al., (83c-01050)

Biography: Filatov, A. N. See Il'yushin, A. A.; et al., (83c:01050)

Filatov, A. N. See Il'yushin, A. A.; et al., (83c:01050)

45-04 Explicit machine computation and programs (not the theory of computation or programming)

45-06 Proceedings, conferences, etc.

mankulov, T.) See Questions of the qualitative investigation and approximate solution of integro-differential equations, 83h:45001 manuliev, M. I.) See Studies in integro-differential equations, 83d:45002;

83h:45002; 83h:45003 and 83k:45001

(Kerimbekov, A. K.) See Questions of the qualitative investigation and approximate solution of integro-differential equations, 83h:45001

Questions of the qualitative investigation and approximate solution of integro-differential equations ★Вопросы качественного исследования и приближенного решения

интегро-диффережциальных уравнений. (Russian) [Questions of the qualitative investigation and approximate solution of integro-differential equations] 83h:45001 dies in integro-differential equations ★Исследования по интегро-пифференциальным уравнениям. (Russian) [Studies in integro-differential equations] 83h:45002

★Исследования по интегро-дифференциальным уравениям. Выз (Russian) [Studies in integro-differential equations. No. 13] 83&45002

★Исследования по интегро-дифференциальным уравнениям. Вып. 14. (Russian) [Studies in integro-differential equations. No. 14] 83h:45003

★Исследования по витегро-дифференциальным уравнениям. Вы (Russian) [Studies in integro-differential equations. No. 15] 83k:45001

secondary classifications:

(Medeuov, E. U.) See All-Union Conference: Asymptotic Methods in the Theory of Singularly Perturbed Equations, (83h:34001)
(Sherstnëv, A. N.) See Constructive theory of functions and functional analysis,

(83c:41001)

(83c:41001)

(Zhautykov, O. A.) See All-Union Conference: Asymptotic Methods in the Theory of Singularly Perturbed Equations, (83h:34001)

All-Union Conference: Asymptotic Methods in the Theory of Singularly Perturbed Equations ★Вессоковная Конференция по Асмытготическим Методам в Теория Симулярно-Возмущенных Уравнений. Часть 1, 2. (Russian) [All-Union Conference on Asymptotic Methods in the Theory of Singularly Perturbed Equations. Parts 1, 2] (83h:34001)

Alma-Ata See All-Union Conference Asymptotic Methods in the Theory of Singularly

Equations. Parts 1, 2] (83h:24001)

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Asymptotic methods in the theory of singularly perturbed equations Всесоюзная Конференция по Асмантотическим Методам в Теории Сингулярно-Возмушенных Уравнежий. Часть 1, 2. (Russian) [All-Union Conference on Asymptotic Methods in the Theory of Singularly Perturbed Equations. Parts 1, 2] (83h:24001)

Constructive theory of functions and functional analysis ЖКонструктиваная теория функций и функциональный анализ. Вып. 3. (Russian) [Constructive theory of functions and functional analysis. No. 3] (83e:41001)

45A05 Linear integral equations

Ektov, Yu. S. See lokhvidov, I. S., 83d:45003

Groetsch, Charles W. On a regularization-Ritz method for Fredholm equations of the first kind. 83m:45001

Hong, Chaim Samuel Linear Stieltjes integro-differential equations. 83c:45001 lokhvidov, I. S. (with Ektov, Yu. S.) Integral J-nonnegative operators and weighted integral equations. (Russian. English summary) 83d:45003 Mel'nik, V. I. Asymptotic properties of solutions of approximately convolution equations. (Russian) 83a:45001 Moran, N. L. A modificactional control of the contro

Moraru, N. I. A two-dimensional convolution-type integral equation solvable in cubatures. (Russian) 83b:45002

Ramm, Alexander G. *Theory and applications of some new classes of integral

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Antonishin, I. O. On the asymptotic behavior of solutions of integral equations with a difference kernel. (Russian) (80c45012)

Christiansen, Soren Condition number of matrices derived from two classes of integral

Edelen, Dominie G. B. The linear integral equations associated with any antiexact solution of the Yang-Mills free field equations. (83e:81086)
Fokas, A. S. (with Ablowitz, Mark J.) Linearization of the Korteweg-de Vries and

levé II equations. (834:35144)

Giaquinta, P. V. See Parrinello, M., (834:82039)
Parrinello, M. (with Giaquinta, P. V.) Analytical solution of a new integral equation for triplet correlations in hard sphere fluids. (834:82039)

Rigolot, C. Potentiel élastique sur une surface non régulière dans un espace de dimension 2 ou 3. [The elastic potential on a nonregular surface in a space of dimension 2 or 3]

Ross, Bertram Brief note: the Riemann-Liouville transformation. (83g:26011)
Staffans, Otof J. On asymptotically almost periodic solutions of a convolution equation. (83b:46056)

45B05 Fredholm integral equations

Allen, R. C., Jr. (with Boicourt, G. P.) An algorithm for solving Fredholm integral equat s with displacement kernels. 83a:45002

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Guy, J. (with Mangeot, B.) Use of group theory in various integral equations. 836:45063 Kotlyar, B. D. (with Semirenko, T. N.) On the spectrum of operators that increase smoothness. (Russian) 83k:45002

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Delves, L. M. See Riddell, L. J., (834:65355)

Dwivedi, A. P. (with Kushwaha, P. S.; Awasthi, R. D.) The stress intensity factor of an exterior crack in a stress free strip with forces at crack face. (83c:73044)

Engl, Heinz W. (with Kress, R.) A singular perturbation problem for linear operators cation to electrostatic and magnetostatic boundary and transmission with an appli problems (83i:78008)

Gacki, Henryk On the random integral equation with advancing argument of the mixed type. (83m:60085)

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Ivanov, E. A. (with Samusenko, A. V.) A problem on the diffraction of a horizontal magnetic dipole by a circular disc that is lying on the infinite bound of interface veen two media. (Russian) (83a:78006)

Jabloński, Zdzisław Solution of the Fredholm integral equation of the second kind using spline functions. (Polish) (83m:45018)

Kakichev, V. A. Ill-posedness of one-sided boundary value problems of the theory of analytic functions. (Russian) (83&30042)
Kalitkin, N. N. See Voloshchenko, O. A., (83]:82026)

Kapshivii, O. O. (with Kopistira, M. P.; Lomonos, L. N.) The problem of the complex x-analytic potential of coaxial ring disks with external radii equal to infinity. (Russian) (83d:30052)

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Levin, David Near-best approximations to the solution of Fredholm integral equation of the second kind. (French summary) (83mx45019)

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Majchrowski, Marian On certain nonlocal problems for a parabolic system of partial

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Paul, H. S. (with Sridharan, K.) The penny-shaped crack problem in micropolar elasticity. (83f:73007)

Rasm, Alexander G. Stable solutions of some ill-posed problems. (83:65102)
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45C05 Eigenvalue problems [See also 34B25, 35Pxx, 45P05.]

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Friedland, Shmuel (with Nowosad, Pedro) Extremal eigenvalue problems with indefinite kernels. (83a:49653)
Fulton, Charles T. An integral equation iterative scheme for asymptotic expansions of

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Knight, B. W. See Sirovich, L., (83m:44007)

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Rieder, G. (with Zastrow, U.) Zur Eingrenzung der Eigenfrequenzen eines stationär schwingenden elastischen Körpers mittels Integralgleichungen. [On the bounding of eigenfrequencies of a stationary oscillating elastic body by means of integral equations]

orlch, L. (with Knight, B. W.) Contributions to the eigenvalue problem for slowly varying operators. (83m:44007) ence, A. See Chu, K. W., (83f:65205)

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45D05 Volterra integral equations [See also 34A10.]

Asanov, A. A class of Volterra integral equations of the first kind. (Russian) 83j:45064
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ingeri, Carlo An asymptotic stability result for the Volterra equation with diffusion. (Italian) 836:45001

Bosch, Carlos (with Falconi, M.; Hernández-Garciadiego, Carlos; Vorel, Z.) Functional integral equations of Volterra type. 83h:45004
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Marocco, Patrizia Topological degree and the stability of a class of Volterra integral

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Two theorems on the uniqueness of continuous solutions of a linear Volterra integral equation of the first kind. (Russian) 83u-45005

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Agarwal, Ravi P. (with Thandapani, E.) Remarks on generalizations of Gronwall's quality. (83g:26025) On an integral ineq

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(with Zevin, A. A.) A class of nuclei for the description of creep in aging media. (Russian) (83kr73033)

Atdaev, S. Unique solvability of a class of equations with a Volterra operator. (Russian)

Baker, Caristopher T. H. (with Wilkinson, Joan C.) Stability analysis of Runge-Kutta methods applied to a basic Volterra integral equation. (834:65344)

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On the existence of a solution of operator equations of Volterra type. (Russian. Tajiki summary) (83g:45021)
Leonov, G. A. (with Smirnova, V. B.) Problems of the stability of systems of phase

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ov, A. Regularization of linear and nonlinear Volterra equations of the first kind. (Russian) (83i:65103)

Swick, K. E. Stability and bifurcation in age-dependent population dynamics.

Tanfulla, M. (with Ribighini, G.) Error estimation procedures in the solution of integral equations of Volterra type. (Italian. English summary) (83k:65100)

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Vapa, P. Approximate solution of nonlinear Volterra integral equations. (83a:45016)
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Welkenfelt, P. H. M. The construction of reducible quadrature rules for Volterra integral

Yang, En Hao A generalization of Bihan's inequality and its applications to nonlinear Volterra integral equations. (Chinese English summary) (83g:26032)
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45E05 Integral equations with kernels of Cauchy type [See also 35J15.]

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Elliott, David Some aspects of singular integral equations—a numerical analyst's viewpoint. (83f:65207)

Gerasoulis, A. (with Srivastav, R. P.) A method for the numerical solution of singular integral equations with a principal value integral. (83e:65047)
Gorlov, V. E. Direct methods for solving a class of singular integro-differential equations.

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idis, Nikolaos I. On the natural interpolation formula for Cauchy-type singular integral equations of the first kind. (German summary) (83d:65350)

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Pilidi, V. S. Necessary conditions for the Fredholm property of characteristic bisingular integral operators with measurable coefficients. (Russian) (83h:47037) illling, H. Einige singuläre Integralgleichungen in der Relaxationsgasdynamik

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45E10 Integral equations of the convolution type (Abel, Picard, Toeplitz and Wiener-Hopf type) [See also 47B35.]

Cherskii, Yu. I. Convolution integral equations with variable coefficients. (Russian)

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Carl, Bernd Entropy numbers of diagonal operators with an application to eigenvalue applications. (83a:4804)

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Béllissard, Jean (with Iochum, B.) Order structure and Jordan Banach algebras. (See 83):46004b)

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Mira, J. A unified approach to the extension problem for normed spaces. (Italian ary) (83i:46009)

Sarmant-Durix, Marie-Claude Annulation de T-filtres par des fonctions croulantes.

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47-XX OPERATOR THEORY

47-01 Elementary exposition, textbooks

Akhiezer, N. I. (with Glazman, I. M.) *Theory of linear operators in Hilbert space. Vol. I 83647001a

(with Glazman, I. M.) *Theory of linear operators in Hilbert space. Vol. II.

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w, A. A. (with Gvishiani, A. D.) *Theorems and problems in functional analysis.

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Krein, S. G. *Linear equations in Banach spaces. (83m:47012)
Kurcyusz, Stanisław *Matematyczne podstawy teorii optymalizacji. (Polish)
[Mathematical foundations of optimization theory] (83m:46002)

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(McKaden, Harold H.) See Kirillov, A. A.; et al., (831-46003)

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Riesz, Frigyes (with Sz.-Nagy, Bela) ★Jexmun no функциональному анализу. (Russian) [Lectures in functional analysis] (83-46002)

(with Sz.-Nagy, Bela) ★Vorlesungen über Funktionalanalysis. (German) [Lectures on functional analysis] (83)-46002a)

(with Sz.-Nagy, Bela) ★Vorlesungen über Funktionalanalysis. (German) [Lectures on functional analysis] (83)-46002b)

Robertson, A. P. (with Robertson, Wendy) ★Topological vector spaces. (83a:46003)

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(Topilitz, Otto) See Ball, Joseph A., (83e:46002)

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47-02 Advanced exposition (research surveys, monographs, etc.)

Erdos, J. A. Nonselfadjoint operator algebras. 83c:47001

mann, Paul A. Functional models, factorizations and linear systems. 83k:47001

*Linear systems and operators in Hilbert space. 83d:47001

Istrițescu, Vasile I. *Introduction to linear operator theory. 83d:47002

secondary classifications:

Butz, Jeffrey R. Compact Hankel operators. (83i:47836)
Conway, John B. ★Subnormal operators. (83i:47836)
Nagel, Rainer Les semi-groupes d'opérateurs positifs et leur générateur. [Semigroups of positive operators and their generators] (83i:47931)

47-03 Historical (must also be assigned at least one classification number from Section 01)

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Jacobson, Nathan Einar Hille, his Yale years, a personal recollection. (83a:01052)
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47-04 Explicit machine computation and programs (not the theory of computation or programming)

47-06 Proceedings, conferences, etc.

(Apostol, Constantin) See Topics in modern operator theory, 83:47002 (Arsene, Grigore) See Topics in modern operator theory, 83:47002 (Douglas, Ronald G.) See Topics in modern operator theory, 83:47002 (Gobberg, Israel) See Topics in modern operator theory, 83:47002 (Sobtraus, A. V.) See Functional analysis, 83:x47001 and 83:xx47001 (St.-Nagy, Béla) See Topics in modern operator theory, 83:x47002 (Toeplitz, Otto) See Topics in modern operator theory, 83:x47002 (Voiculescu, Dan) See Topics in modern operator theory, 83:x47002

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Smirnov, V. I. *Lehrgang der höheren Mathematik. Teil IV. (German) [Course in higher mathematics. Part IV] (83j:00004)

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49-02 Advanced exposition (research surveys, monographs, etc.)

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[Course on nonlinear functional analysis. III] 83f:49005

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Glowinski, Roland (with Lions, Jacques-Louis; Trémolières, Raymond) ★Numerical analysis of variational inequalities. (83k:49014)

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49F15 Morse theory in Hilbert and other spaces [See also 57R27, 58Exx.] secondary classifications:

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49F20 Geometric measure and integration theory, integral and normal currents, flat chains and cochains, varifolds [See also 28A75, 32C30, 58A25, 58C35.]

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49F22 Existence and structure of solutions to variational problems in geometric measure-theoretic setting

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49F25 Surface area; Weierstrass and Burkill integrals, subadditive set

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Rund. Hanno An extension of Noether's theorem to transformations involving

position-dependent parameters and their derivatives. (83k:59023)
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Warpa, J. Fat homeomorphisms and unbounded derivate containers. (83f:58007)

49Gxx Variational methods for eigenvalues [See also 47A70.]

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49G05 Variational approach to eigenvalues

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49G10 Rayleigh-Ritz methods

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49H05 Variational principles of physics [See also 70-XX, 81-XX.]

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51-06 Proceedings, conferences, etc.

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51L05 Geometry of orders of nondifferentiable curves

51L10 Directly differentiable curves

51L15 n-vertex theorems via direct methods

51L20 Geometry of orders of surfaces

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Connelly, Robert Rigidity and energy. (83m:52012)

Edmonds, Allan L. (with Ewing, John H.; Kulkarni, Ravi S.) Regular tessellations of surfaces and (p,q,2)-triangle groups. (83h:57005)

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Mackay, Alan L. De nive quinquangula: on the pentagonal snowflake. (83c:51023)
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McLarnan, T. J. The numbers of polytypes in sheet silicates. (83m:52015)

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Pedersen, Jean J. See Hilton, Peter J., (83g:52008)

Preparata, Franco P. (with Supowit, Kenneth J.) Testing a simple polygon for monotonicity. (834-68028)
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Salikhov, G. N. (with Geshel', M. I.) Construction of an invariant basis of the group \overline{G}_4^{24} . (Russian) (83h:20046)

Scott, Paul R. On a family of polygons. (83h:52016) Shephard, Geoffrey C. See Grünbaum, Branko, (83a:05056), (83i:52015a) and (83i:52015b)

rens, Peter S. *Handbook of regular patterns. (83c:00007)

Street, Anne Penfold See Hoskins, W. D., (83k:05034)
Supowit, Kenneth J. See Preparata, Franco P., (83k:05028)
Williams, Robert *The geometrical foundation of natural structure. (83h:00003)

Wunderlich, Walter Kipp-Ikosaeder. I. [Flex-icosahedra. I] (83e:52013) Zimnev, M. M. See Bereznaya, I. Ya.; et al., (83e:05012)

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51M25 Length, area and volume [See also 26B15.]

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Yang, Lu (with Zhang, Jing Zhong) A class of geometric inequalities on finite points. (Chinese) 83f:51027

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lock, Frieder Ein Beweis für die Strahlensätze. [A proof for intercept theorems]

Kuchel, Philip W. (with Vaughan, Rodney J.) Average lengths of chords in a square. (83f-60026)

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51M30 Line geometries and their generalizations

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Weiß, Gunter Zur euklidischen Liniengeometrie. III. [On Euclidean line geometry. III]
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secondary classifications:

Richara, Alessandro (with Mazzocca, Francesco) On a characterization of Grassmann Hichara, Alessandro (with Mazzocca, Francesco) On a characterization of Grass space representing the lines in an affine space. (83k:51003) Mazzocca, Francesco See Bichara, Alessandro, (83k:51003) Wagon, Stanley Circle-squaring in the twentieth century. (83a:51002) Whitfield, J. H. M. (with Yong, S.) A characterization of line spaces. (83a:52005) Yong, S. See Whitfield, J. H. M., (83a:52005)

51M35 Synthetic treatment of fundamental manifolds in projective geometries (Grassmannians, Veronesians and their generalizations) [See also 14M15.]

secondary classifications:

Fearnley-Sander, Desmond Euclid with an unfamiliar ring. (838:51030) Havlicek, Hans Zur Theorie linearer Abbildungen. I, II. (English summary) [On the theory of linear mappings. I, II] (83k:14045)

51M99 None of the above, but in this section

Gaidalovich, V. G. Orthogonal transformations in the pseudo-Euclidean space 1R3.

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Lester, J. A. The Beckman-Quaries theorem in Minkowski space for a spacelike square-distance. (83e:51008)
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Schreiber, Peter Kategorizitätsbeweise in der Geometrie. [Proofs of categoricity in

geometry] (83b:03034)

Srinivasa Rao, K. N. (with Saroja, D.; Gopala Rao, A. V.) On rotations in a pseudo-Euclidean space and proper Lorentz transformations. (83a:51013)

51Nxx Analytic and descriptive geometry

secondary classifications:

m *Lineare Algebra und analytische Geometrie. Band II. (German) [Linear algebra and analytic geometry. Vol. II] (83f:51001)

51N05 Descriptive geometry

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Klimakhin, A. G. **Cбориях адам по вачертательной геометрии. (Russia collection of problems in descriptive geometry) 834:51031

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Nikolova, V. B. An analytical method of determining the horizon and design elements with perspective. (Bulgarian. English and Russian summaries) 83d:51032
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nomographique d'une classe de systèmes d'équations par des nomogrammes à rent orienté avec des familles des lignes côtées. [Nomographic representation of a class of systems of equations by nomograms with transparent oriented by families of level curves] (83h:65136)

Israel, Gerd-Reiner Zur Approximation von Kreisen durch axialsymmetrische Koppelkurven. [The approximation of circles by axisymmetric coupler curves] (83i:53018)

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füller, Werner See Luck, Kurt; et al., (83c:70004)

usal, Hermann Zur perspektiven Zerlegung und Fixpunktkonstruktion der Affinitäten von $A^{n}(K)$. [On the perspective decomposition and construction of fixed points of the affinities of $A^{n}(K)$] (83h:51006)

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51N10 Affine analytic geometry

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Mateski, Stevo M. Contribution concerning imaginary conics with a presentation of their real representative. (Macedonian. German summary) 824-51034

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Parlyuchenko, Yu. V. Examples of point relations with coincident characteristic configurations. I. (Russian) 836-51043

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Hartl, Johann Einheitliche Darstellung der Bewegungen der dreidimensionalen nichtentarteten Cayley-Klein Rhume. (English and Serbo-Croatian summaries) [Unified presentation of the motions of three-dimensional nondegenerate Cayley-Klein spaces] (83f:51625)
 Paukowitsch, Hans Peter Über oskulierende Quadriken und oskulierende quadratische Kegel im reellen m-dimensionalen projektiven Raum. [On osculating quadrics and osculating quadratic cones in real m-dimensional projective space] (83f:53622)

51N20 Euclidean analytic geometry

 Bors, Maria (with Marica, Carmen; Viaşu, Maria) The fundamental relations of multidimensional orthogonal axonometry. (Romanian. French summary) 83e:51026
 Bottema, O. The concept "special" in relation to points in the geometry of triangles. (Dutch) 83i:51037

ner, Kurt Über Zentralschnitte des Rotationsellipsoides. [On central sections of

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Grigorov, Kh. Modeling of a rectilinear three-dimensional Euclidean space in unicursal circular curves of the third order. (Bulgarian. English and Russian summaries)

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Kratky, Kart W. Intersecting disks (and spheres) and statistical mechanics. I. Mathematical basis. 83a:51029

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Meyer zur Capellen, W. Die Scheitelkurve sphärischer Thalesellipsen. [The vertex curve of spherical Thales ellipses] 83m:51035

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Presence, Mechanid Uber geometrische Zentralbeleuchtung von Kugel, Drehzylir Drehkegel. [On geometric central illumination of spheres, rotating cyline rotating comes] 83h:51045

Pečarić, Josip E. (with Janic, Radovan R.; Klamkin, Murray S.) Inequalities for polygons. (Serbo-Croatian summary) 83e:51036

Strubecker, Karl Bemerkungen zur invarianten Hauntachsenagetalt signalism.

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Vetter, Wilhelm Die Sichel des Archim es. Eine Verallgeme logarithmische Spirale. [The arbelos of Archimedes. A generalization for the logarithmic spiral] 83g:51031

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secondary classifications:

Banchoff, Thomas F. Double tangency theorems for pairs of submanifolds. (83h:53005)
Glaeser, Georg Über die Rotoidenwendelflächen. [On the warped rotoids whose generator is a straight line] (83h:53018)

Hst, Chen Jung On infinitely many chains analogous to Clifford's chain. (83d:51008)

Lawden, G. H. Two related triangle maximization problems. (83h:51031)

Lopatchenko, B. K. (with Shul'gin, I. V.) Experimental studies of binocular space perception. (Russian) (83f:51002)

sorge E. *The foundations of geometry and the non-Euclidean plane. (83):51001)

Read, Neville Peaucellier and the torus. (83f:51011)
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Tölke, Jürgen (with de Vasconcelos, Elinalva V.) Die Zwangläufe, bei denen das gleichseitige hyperbolische Paraboloid Bewegfläche eines Kegelschnittes ist. [The forced motions in which the equilateral hyperbolic paraboloid is the moving surface of

a conic section] (SM:53012)

Turner, Philip H. Convex caustics for billiards in R² and R³. (83i:52016)
de Vasconcelos, Elinalva V. See Tolke, Jürgen, (83k:53012)

51N25 Analytic geometry with other transformation groups

Bottema, O. (with Primrose, E. J. F.) A quadratic transformation in plane kinematics. 83451038

Dukhvalov, L. D. Some homogeneous spaces over an algebra of quasimatrices. (Russian) 83m:51037

Primrose, E. J. F. See Bottema, O., 83i:51038

secondary classifications:

Pasquali Coluzzi, Dario Trigonometry and symmetries of the hyperbolic plane. (Italian. English summary) (83j:51029)

Wilker, J. B. Inversive geometry and the hexlet. (83a:51012)
Zhivkova, Zh. T. Shadows cast by rotational and certain nonrotational surfaces in the case of parallel illumination. (Bulgarian. French and Russian summaries) (83d:51033)

51N30 Geometry of classical groups [See also 20Gxx, 14Lxx.]

secondary classifications:

Belov, N. V. See Chuprunov, E. V.; et al., (83k:20054)
Chuprunov, E. V. (with Tarkhova, T. N.; Belov, N. V.) On the description of special positions in Submikov groups. (Russian) (83k:20054)
Cohen, Jeffrey Mitchell On covering Klein's curve and generating projective groups. (83k:10049)

Gorzhaltsan, I. M. Invariants of the quasisimple Lie group \tilde{D}_n^m . (Russian) (836:51021)

Kashirina, I. N. See Rozenfel'd, B. A.; et al., (83k:51013)

Kharitonova, N. I. See Rozenfel'd, B. A.; et al., (83k:51013)

Quaisser, Erhard Gruppentheoretischer Aufbau affiner Räume einer beliebigen Dimension >2 auf der Grundlage von Schrägspiegelungen. [Group-theoretic construction of affine spaces of arbitrary dimension >2 on the basis of oblique reflections] (83k:51024)

Rozenfel'd, B. A. (with Kharitonova, N. I.; Kashirina, I. N.) Finite geometries with simple, semisimple, and quasisimple fundamental groups. (83k:51013) Tarkhova, T. N. See Chuprunov, E. V.; et al., (83k:20054)

51N35 Questions of classical algebraic geometry [See also 14Nxx.]

Hua, Xuan Ji Inflection points and singular points of a quartic Bézier curve. (Chinese. English summary) 83j:51035

secondary classifications

Hartl, Johann Die Maximalerzeugenden der projektiven Quadriken. [The maximal generators of projective quadrics] (83m:14043) van IJzeren, J. Feuerbach parabolas. (Dutch) (83e:51025)

51N99 None of the above, but in this section

Chew, K. L. On the trisection of an angle. 83c:51037

lovich, V. G. (with Gayubov, G. N.) Some questions of analytic geometry in the plane. (Russian) 83c:51038 Gayubov, G. N. See Gaidalovich, V. G., 83c:51038

secondary classifications:

Gilbert, William J. Geometry of radix representations. (83):12001)
Lovász, László (with Yemini, Yechiam) On generic rigidity in the plane. (83b:52007)
Yemini, Yechiam See Lovász, László, (83b:52007)

52-XX CONVEX SETS AND RELATED GEOMETRIC TOPICS

52-01 Elementary exposition, textbooks

Kahle, Dietrich "Vielecke mit konstanter Abstandssumme"-ein vielseitiges Thema für elementare geometrische Überlegungen. ["Polygons with constant distance sum"-a versatile topic for elementary geometric considerations] 83i:52001
Lay, Steven R. **Convex sets and their applications. 83e:52001

secondary classifications:

Gagnon, Sylvain Les polyèdres convexes aux faces régulières. [Convex polyhedra with regular faces] (83k:52009)

Niven, Ivan *Maxima and minima without calculus. (83i:52011)

Williams, Robert ★The geometrical foundation of natural structure. (83h:00003)

52-02 Advanced exposition (research surveys, monographs, etc.)

Larman, D. G. Recent results in convexity. 83b:52001

secondary classifications:

Bachen, Achim (with Grötschel, Martin) New aspects of polyhedral theory. (83h:90053) Grötschel, Martin See Bachen, Achim, (83h:90053)

52-03 Historical (must also be assigned at least one classification number from Section 01)

secondary classifications:

Bockstaele, Paul P. Adrianus Romanus and Giovanni Camillo Glorioso on isoperimetric figures. (83k:01018)

(Glorioso, Giovanni Camillo) See Bockstaele, Paul P., (83k:01018) Hilton, Peter J. (with Pedersen, Jean J.) Descartes, Euler, Poincaré, Pólya—and

Hilton, Peter J. (with Pedersen, Jean J.) Descartes, Emer, ron polyhedra. (83g:52008) Pedersen, Jean J. See Hilton, Peter J., (83g:52008) (Romanus, Adrianus) See Bockstaele, Paul P., (83k:01018) Senechal, Marjorie Which tetrahedra fill space? (83k:52020)

52-04 Explicit machine computation and programs (not the theory of computation or programming)

Avis, David See El-Gindy, H., 83g:52001 and Toussaint, Godfried T., 83h:52002

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Bentley, Jon Louis (with Faust, Mark G.; Preparata, Franco P.) Approximation algorithms for convex hulls. 83m:52001
Boyles, Stephanie M. (with Ritter, Gerhard X.) The encoding of arbitrary

two-dimensional geometric configurations. 83a:52001

Chung, F. R. K. (with Garey, M. R.; Johnson, David S.) On packing two-dimensional

B1-Gindy, H. (with Avis, David) A linear algorithm for computing the visibility polygon from a point. 83g:53001

Faust, Mark G. See Bentley, Jon Louis; et al., 83m:52001

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Guan, Ying Nam A procedure for computing the number of faces and the coordinates of the vertices in a convex mixture bounded above and below. (Chinese) 83g:52002

Johnson, David S. See Chung, F. R. K.; et al., 83k:52001

Lotwick, H. W. Simulation of some spatial hard core models, and the complete packing

problem. 83m:52002

theiss, T. H. (with Schmidt, Brian K.) Computational results on an algorithm for

finding all vertices of a polytope. 83a:52002

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52A55 Spherical and hyperbolic convexity

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53-02 Advanced exposition (research surveys, monographs, etc.)

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(Coranack, A. M. The Radon transform on a family of curves in the plane. II. (83):44002)
(Craioreanu, Mircea (with Puja, Mircea) Cohomology on a Riemannian foliated manifold with coefficients in the sheaf of germs of foliated currents. (83):58012)

Davison, M. E. (with Grünbaum, F. Alberto) Tomographic reconstruction with arbitrary

directions. (83k:44012)

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Mecke, J. (with Stoyan, Dietrich) Formulas for stationary planar fibre processes. I. General theory. (German and Russian summaries) (83c:60022a)
Formulas for stationary planar fibre process. II. Intersections with fibre systems. (German and Russian summaries) (83c:60022e)
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Ohser, Joachim A remark on the estimation of the ruse of directions of fibre processes. (German and Russian summaries) (83e:60009)

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Phillips, Ralph S. See Lax, Peter D., (83b:63015) and (83b:63016)

Pula, Mircea See Craiovesam, Mirces, (83b:53012)

Robertson, Jack M. See DeTemple, Dunne W., (83e:60021)

Schneider, Rolf Curvature measures and integral geometry of convex bodies. (83k:52012)

A uniqueness theorem for finitely additive invariant measures on a compact homogeneous space. (83g:28028) homogeneous space. (83g:28028)

Crofton's formula generalized to projected thick sections. (#3gs60023)

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Saint-Venant equation. (Russian) (63m:73028)
Shchedrin, B. M. See Feight, L. A.; et al., (83d:6334)
Shifrin, M. A. Nonlocal inversion formulas in a problem of integral geometry for a pair of Grassmann manifolds. (Russian) (83m:43007)
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Skarka, V. V. On an inversion formula. (Russian) (83d:35164)
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Watson, Geoffrey S. Distributions on the circle and sphere. (83d:63035)

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Zufallige Berührung konvexer Körper durch q-dimensionale Ebenen.

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Yoshida, Masaaki Volume formula for certain discrete reflection groups in PU(2,1).

53C70 Direct methods (G-spaces of Busemann, etc.)

Berestovskii, V. N. Homogeneous Busemann G-spaces. (Russian) 83j:53671 Berger, Marcel Une caractérisation purement métrique des variétés riem

courbure constante. (English summary) [A purely metrical characterization of Riemannian manifolds with constant curvature] 83j:53072

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Two-dimensional kinematics of bounded curvature. II. (Russian) (83b:53058b)
Oledzki, Juliusz Metric spaces with intrinsic geometrical structure. (See 83c:54001)

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Basombrio, F. G. A company of the Structure of Supermanifolds. (See \$3j-55001)
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Brown, S. A. (with Panagopoulos, H.; Pranad, M. K.) Two separated SU(2)
Yang-Mills-Higgs monopoles in the Atiyah-Drinfel'd-Hitchin-Manin-Nahm construction. (\$3m-\$1699)
Conserved vector current of the SL(2, C) gauge

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Cattaneo-Gasparini, Ida (with Gualandri, L.) Lie connections and deformations on a flat symplectic manifold. (Italian) (83i:58049)

E. (with Goddard, P.) An n monopole solution with 4n-1 degrees of freedom.

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Derell, T. (with Tucker, R. W.) Weyl scalings and spinor matter interactions in scalar-tensor theories of gravitation. (83b:83042)

Drish, W. F., Jr. See Wild, W. J.; et al., (83d:83016)

Edelen, Dominic G. B. On the traction boundary value problem in the linearized gauge theory of dislocations. (83b:73063)

See also Kadić, Aida, (83b:73065)

Ferraris, Marco (with Kijowski, Jerzy) Unified geometric theory of electromagnetic and gravitational interactions. (83b:80035)

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Forgács, Peter (with Horváth, Zalán; Palla, László) Finitely separated multimonopoles
generated as solitons. (SShS1682)
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[Relativistic thermodynamics] (80h:82034)
Glassey, Robert T. (with Strauss, Walter Alexander) Some global solutions of the
Yang-Mills equations in Minkowskis space. (83h:81086)
Goddard, P. See Corrigan, E. (83h:81078)
Gotay, Mark J. (with Sniatycki, Jedrzej) On the quantization of presymplectic dynamical
systems via coisotropic imbeddings. (83j:58050)
Gottlieb, I. (with Zet, Gh.) On the tensor operators in parallelizable spaces. (83j:53041)
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Gürses, Metin Maxwellian Yang-Mills fields. (83i:58059)

Horváth, Zalán (with Kiss-Tóth, Tibor) On static, axially symmetric solutions of four-dimensional principal o models. (83m:81063)

See also Forgács, Peter; et al., (83h:81062)

Hoyos, J. (with Quirós, M.; Ramirez Mittelbrunn, J.; de Urries, F. J.) Superfiber bundle structure of gauge theories with Faddeev-Popov fields. (83m:81064)

Huleihil, Kh. Classification of some gauge fields. (Italian and Russian summaries)

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Johnson, Russell A. The bundle boundary for the Schwarzschild and Fried

solutions. (83k:83638)

Kadlé, Alda (with Edelen, Dominic G. B.) A Yang-Mills type minimal coupling theory

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Kise-Toth, Tibor See Horváth, Zalán, (83:e81063)
Kyriakopoulos, E. Solutions of the Yang-Mülls field equations. (83:e81067)
Maia, Ema Conformal symmetry breaking and mass generation. (83:e8115)
Marnelius, Robert Gauge-fixing conditions and natural decompositions of fields. (83:e81073)
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fields. (83g:81073)

Mecklesson, Jouko On a relation between Maxwell and Dirac theories. (83g:81116)

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Nissani, N. See Carmeli, Moshe, (83g:83022)

Panagopoulos, H. See Brown, S. A.; et al., (83m:81092)

Parthacarathy, Ragavachariar (with Viswanathan, K. S.) Magnetic monopoles in SU(3)

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Pèrez-Rendon, A. General relativity as a gauge theory. (83g:83049)

Prasad, M. K. See Brown, S. A.; et al., (83m:81099)

Quiròs, M. (with Ramírez Mittelbrunn, J.; Rodriguez, Emilia Carmen) On the topological meaning of magnetic charge quantization. (83g:81110)

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ossi, Paolo Exact results in the theory of nonabelian magnetic monopoles. (83m:81109)

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Shen, You Gen See Wu, Yong Shi, (83k:81061)

Sniatycki, Jedrzej See Gotay, Mark J., (83k:80050)

Sofonea, Liviu Un modèle géométrique unitaire à connexions non-symétriques et quelques interprétations physiques. [A unitary geometrical model with nonsymmetrical connections and some physical interpretations] (83a:83062)

Song, Xing Chang See Zhou, Guang Zhao, (83m:81073)

Strauss, Walter Alexander See Glassey, Robert T., (83b:81086)

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Ward, R. S. Magnetic monopoles with gauge groups SU(3) broken to U(2). (83b:81010)

Watson, Bill Riemannian submersions and instantons. (83g:81072)

Wild, W. J. (with Kerns, R. M.; Drish, W. F., Jr.) Stretching a black hole. (83d:83016)

Wu, Yong Shi (with Shen, You Gen) Statically spherically symmetric self-dual solutions of the Yang.-Mills field equation and 't Hooft-Polyakov monopoles distributed continuously on a sphere. (Chinese. English summary) (83i:81061)

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Zakrzewski, W. J. Classical solutions to CPⁿ⁻¹ models and their generalizations. (83m:81072)

Zet, Gh. See Gottlieb, I., (83j:53041)

Zhou, Guang Zhao (with Song, Xing Chang) Backlund transformation, local and nonlocal conservation laws for nonlinear σ-models on symmetric coset spaces.

Zinov'ev, Yu. M. R-gauge theories. (Russian. English summary) (83k:81077)

53C99 None of the above, but in this section

Choi, Hyeong In On the Liouville theorem for harmonic maps. 83j:53073
Gancarzewicz, Jacek Local triviality of a bundle of geometric objects. 83m:530
Geometries defined by pseudogroups of transformations. 83m:53086b
Gsuchman, Hillel On a decomposition of Riemannian manifolds. 80:e53075

Radu, F. Derivation operators and vector fields on differentiable manifolds. (Rom:

French summary) 83h:53085
Shapukov, B. N. The Lie derivative in fiber spaces. (Russian) 83g:53045
Smillie, John An obstruction to the existence of affine structures. 83a:53069

secondary classifications:

Borsuk, Karol On homeomorphisms preserving lengths of arcs. (Serbo-Croatian ary) (83h:51039)

Gavrilov, S. P. Reduction of a symmetric nondegenerate form on two-dimensional and three-dimensional real Lie algebras to canonical form by automorphisms of Lie algebras. (Russian) (83i:17010)

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Gomez, Francisco A residue formula for characteristic classes. (83a:57029)
Guts, A. K. The axiomatic theory of relativity. (Russian) (83h:83003)
Itoh, Mitsuhiro Invariant connections and Yang-Mills solutions. (83h:53029)
Kingenberg, Wilhelm Sphärische Kurven mit beschränkter Selbstschnittzahl. [Spherical curves with bounded self-intersection number] (83):58035)
Paneitz, Stephen M. Invariant convex cones and causality in semisimple Lie algebras and

groups. (83h:22029)

Pavlov, E. V. (with Vasil'eva, M. V.) Conformal-holomorphic correspondence between B-manifolds. (Russian) (83d:53027)

Rosenberg, Steven Gauss-Bonnet theorems for noncompact surfaces. (83i:53064)
Vasil'eva, M. V. See Pavlov, E. V., (83d:53027)

54-XX GENERAL TOPOLOGY {For the topology of manifolds of all dimensions, see 57Nxx.}

54-01 Elementary exposition, textbooks

nstantinescu, Corneliu *Topologische Räume. (German) [Topological spaces]

Dixmier, Jacques

★Topologie générale. (French) [General topology] 83a:54002

Lima, Elon Lages ★Espaços métricos. (Portuguese) [Metric spaces] 83d:54001

von Querenburg, Boto ★Mengentheoretische Topologie. (German) [Set-theoretic topology] 83d:54002

secondary classifications:

re, K. G. *The foundations of analysis: a straightforward introduction. Book 2.

(83d:26001)

Blaszczyk, Aleksander ★Aspekty topologiczne algebr Boole'a. (Polish) [Topological aspects of Boolean algebra] (83j:06001)

Dieudonné, Jean Alexandre ★Éléments d'analyse. Tome I. (French) [Elements of analysis. Vol. I] (83d:00002)

Gvishiani, A. D. See Kirillov, A. A., (83b:46003)

(Huet, D.) See Dieudonné, Jean Alexandre, (83d:00002)

(Julia, Gaston) See Dieudonné, Jean Alexandre, (83d:00002)

Kirillov, A. A. (with Gvishiani, A. D.) ★Theorems and problems in functional analysis. (83b:66003)

Lahiri, B. K. ★Elements of functional analysis. (83e:46003)
(McFaden, Harold H.) See Kirillov, A. A.; et al., (83h:46003)
Moise, Edwin E. ★Introductory problem courses in analysis and topology. (83i:00008)

54-02 Advanced exposition (research surveys, monographs, etc.)

Nagata, Jun-iti Recent developments in general topology. 83b:54001a Recent developments in general topology. II. 83b:54001b

secondary classifications:

Matuzevičius, A. Topology. (Russian. English and Lithuanian summaries) (83k:01051) Vaughan, J. E. Some cardinals related to c and topology. (83i:54007)

54-03 Historical (must also be assigned at least one classification number from Section 01)

chsmeyer, Jürgen W. Rinows Arbeiten über lokal zusammenhängende Kompaktifizierungen und Primendentheorie. [W. Rinow's works on locally connected compactifications and the theory of prime ends] 83e:54001

secondary classifications:

(Baire, René) See Gispert-Chambaz, Hélène, (83d:01044a) (Bolzano, Bernard) See Simon, Petr. (83k:01048) (Brouwer, L. E. J.) See Gispert-Chambaz, Hélène, (83d:01044a) Cameron, Douglas E. A view of Soviet topology. (83e:01085)

skik, D. See Flacksmeyer, Jürgen; et al., (83c:01026) chameyer, Jürgen (with Cieslik, D.; Schmidt, Hans-Jürgen; Wenzel, L.) Gauss' Einfluss auf die Entwicklung der Topologie. [Gauss's influence on the development of topology] (83c:01026)

topology] (83-c01626)
(Fréchet, Maurice René) See Gispert-Chambaz, Hélème, (83d-0164a)
Gispert-Chambaz, Hélème Correspondance de Fréchet (1907-1926) et son apport à la
théorie de la dimension (avec 3 lettres de Brouwer à Baire). [Correspondence of
Fréchet (1907-1926) and his contribution to dimension theory (with 3 letters from
Brouwer to Baire)] (83d-01044a)
See also Guillaume, Marcel Letter to the editor: "Correspondence of Fréchet (1907-1926) and his
contribution to dimension theory (with 3 letters from Brouwer to Baire)" [Colvines du
Seintiment el Histories de Mathématiques I (French), pro [60, 120] last Henri Poines du

iques, 1 (French), pp. 69-120, Inst. Henri Poincaré, singire d'Histoire des Mathé Paris, 1980; MR 83d:01044a] by H. Gispert. (83d:01044b)

Jones, F. Burton Aposyndesis, homogeneity and a bit more history. (83m:01051) (Moore, Robert Lee) See Wilder, Raymond Louis, (83k:01047) Nylkos, Peter F. Burton Jones's contributions to the normal Moore space problem. (83):54022)

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Schmidt, Hans-Jürgen See Flachsmeyer, Jürgen; et al., (83c:01026)
Simon, Petr Bernard Bolzano and dimension theory. (Czech) (83h:01048)
Wenzel, L. See Flachsmeyer, Jürgen; et al., (83c:01026)
Wilder, Raymond Louis The mathematical work of R. L. Moore: its background, nature and influence. (83k:01047)

tiography: Moore, Robert Lee See Wilder, Raymond Louis, (83k:01047)

graphy: Moore, Robert Lee - See Wilder, Raymond Louis, (R3k:01047)

54-04 Explicit machine computation and programs (not the theory of computation or programming)

54-06 Proceedings, conferences, etc.

(Aleksandrov, P. S.) See Seminar: General Topology, 83d:54004 (Borsuk, Karol) See Proceedings: International Conference on Geometric Topology. 834-54003

(Boyd, J. R.) See Conference: Topology, 83h:54001 (Gordh, G. R., Jr.) See Conference: Topology, 83h:54001 (Kirkor, Andrzej) See Proceedings: International Conference on Geometric Topology, 834-54003 (Kuperberg, Włodzimierz) See Proceedings: Topology Conference, 83c:54001 and 83c:54001

(Rood, G. M.) See Proceedings: Topology Conference, 83c:54001 and 83E54001

enor, Phillip) See Proceedings: Topology Conference, 83c:54001 and 83i:54001

cksburg, Va. See Proceedings: Topology Conference, 83c:54001 and 83i:54001

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See also Proceedings: Topology Conference, 83c:54001 and 83i:54001

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Topology Conference on Geometric Topology *Proceedings of the International Conference on Geometric Topology. 83d:54003

Topology Conference *The Proceedings of the 1981 Topology Conference.

82c:54001

★The Proceedings of the 1981 Topology Conference. 83i:54001

Fixed Point Theory ★Seminar on Fixed Point Theory. 83j:54001 General Topology ★Семинар по Общей Топологии. (Russian) [Seminar on General Topology] 83d:54004

Warsaw See Proceedings: International Conference on Geometric Topology, 83d:54003

secondary classifications:

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Ferry, Steve Finitely dominated compacta need not have finite type. (83d:57015) Grispolakis, Joachim Confluent mappings and the fundamental group. (Russian

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Kamchatnor, A. M. Topological solitons in magnetohydrodynamics. (83n:76081)

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Kundu, A. Construction of nonlinear o-models in two and higher space-dimensions.

Löffler, Peter Homotopielineare Z, Operationen auf Sphären. [Homotopy-linear Z, actions on spheres] (83b:57024)

Mermin, N. D. The topological theory of defects in ordered media. (83f:82042)

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Porter, Timothy Une théorie catégorique d'homotopie simple. [A categorical theory of simple homotopy] (83h:55040)

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Singh, Sukhilit Pro-homology and isomorphisms of pro-groups. (83a:20066)

Walker, James W. Homotopy type and Euler characteristic of partially ordered sets. Walker, Jam

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55Q05 Homotopy groups, general; sets of homotopy classes

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Farmer, Frank D. Homotopy spheres in formal language. (83):68087)
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Porter, Timothy Čech and Steenrod homotopy and the Quigley exact couple in strong shape and proper homotopy theory. (KSk:55003)

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55Q20 Homotopy groups of wedges, joins, and simple spaces

55Q25 Hopf invariants

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Harper, John R. (with Miller, Haynes) On the double suspension homomorphism at odd primes. (83h:55037)

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55Q30 Homotopy groups of triads, n-ads

55Q35 Operations in homotopy groups

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55Q40 Homotopy groups of spheres

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55Q45 Stable homotopy of spheres

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55O50 The J-morphism

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55Q52 Homotopy groups of special spaces

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55Q55 Cohomotopy groups

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55Q70 Homotopy groups of special types [See also 55N05, 55N07.]

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55Rxx Fiber spaces and bundles [See also 18F15, 32Lxx, 46M20, 57R20, 57R22, 57R25.]

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Lumiste, Ülo Connections in associated fibre bundles. (83g:53031)

Mayer, M. E. (with Trautman, A.) A brief introduction to the geometry of gauge fields.

Nash, Patrick L. A factorization of M₄: construction of the principal bundle of orthogonal frames over M₄ from O(3,3) spinors. (83h:83004)

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55R20 Spectral sequences and homology of fiber spaces [See also 55Txx.]

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55R35 Classifying spaces of groups and H-spaces

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55R50 Stable classes of vector space bundles, K-theory {For algebraic K-theory, see 18F25.}

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55R60 Microbundles and block bundles [See also 57N55, 57Q50.]

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Mann, Benjamin M. (with Miller, Edward Y.) On mapping tori and projective bundle constructions in PL cobordism. (83j:57011)

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55S15 Symmetric products, cyclic products

55S20 Secondary and higher cohomology operations

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55S30 Massey products

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55S35 Obstruction theory

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Audin, Michèle Obstructions à trouver un champ de k-repères dans un fibré vectoriel. (English summary) [Obstructions to finding a field of k-frames in a vector bundle] (834:57018)

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55Txx Spectral sequences [See also 18G40, 55R20.]

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Miller, Haynes An algebraic analogue of a conjecture of G. W. Whitehead. 83e:55026

See also Harper, John R., 83h:55037

Shimomura, Katsumi Novikov's Ext² at the prime 2. 83e:55027

Wellington, Robert J. The unstable Adams spectral sequence for free iterated loop spaces.

secondary classifications:

Bendersky, M. (with Curtis, E. B.; Ravenel, Douglas C.) EHP sequences in BP theory.

Curtis, E. B. See Bendersky, M.; et al., (83k-55009)
Davis, Donald M. On the Segal conjecture for $Z_2 \times Z_2$. (83a-55023)
Oka, Shichiro Note on the β -family in stable homotopy of spheres at the prime 3. (83a-55019)

s C. See Bendersky, M.: et al., (R3k:55

55T20 Eilenberg-Moore spectral sequences [See also 57T35.] secondary classifications:

Smith, Larry On the characteristic zero cohomology of the free loop space. (83k:57035)

55T25 Generalized cohomology

55T99 None of the above, but in this section

55Uxx Applied homological algebra and category theory [See also

55U05 Abstract complexes

55U10 Semisimplicial complexes

Brown, Ronald (with Higgins, Philip J.) The equivalence of ω-groupoids and cubical (with Higgins, Philip J.) The equivalence of ∞-groupoids and crossed complexes.

Higgins, Philip J. See Brown, Ronald, 83j:55020

secondary classifications:

Katz, Dyahu Cofibrations of algebras. (83h:55039)
Makharadze, L. M. Homotopy of the inverse limit of a sequence of pseudosimplicial rings and its application. (Russian. English and Georgian summaries) (83e:55007)

55U15 Chain complexes

Gugenheim, V. K. A. M. On a perturbation theory for the homology of the loop-space. 831:55021

55U20 Universal coefficient theorems, Bockstein operator

55U25 Homology of a product, Künneth formula

55U30 Duality

secondary classifications:

Huỳnh Mùi Duality in the infinite symmetric products. (83g:55006)

55U35 Abstract homotopy theory

Brown, Ronald Higher-dimensional group theory. 83k:55014

Jardine, J. F. Algebraic homotopy theory and some homotopy groups of algebraic groups. 83a:55028

Katz, Eyahu Cofibrations of algebras. 83h:55039
Porter, Timothy Une théorie catégorique d'homotopie simple. [A categorical theory of simple homotopy] 83h:55040

Vázquez, Roberto Homotopy and shape in topological categories. (Spanish) 83h:55041

secondary classifications:

Barr, Michael (with Diaconescu, Radu) On locally simply connected toposes and their fundamental groups. (83e:18002)

Diaconescu, Radu See Barr, Michael, (83e:18002)

55U40 Topological categories

55U99 None of the above, but in this section

secondary classifications:

Beyl, F. Rudolf Products of acyclic groups—examples. (83k:20039)

Dominguez Murillo, Eladio (with Hernández, Luis J.) Groupes d'homotopie propre associés à une catégorie de prébordisme. (English summary) [Proper homotopy groups associes à une catègorie de prébordisme. (English summary) [Proper homotopy groups associated with a category of prebordism] (83:55021)

Félix, Yves Modèles bifiltrés: une plaque tournante en homotopie rationnelle. [Bifiltered models: a turntable in rational homotopy] (83:55013)

Gunnarsson, Thomas E. W. A-theory and the transfer category. (See 83k:57001)

Harper, John R. (with Miller, Haynes) On the double suspension homomorphism at odd

Harper, John R. (with Nature), Language Primes. (83h:55037)
Hernández, Luis J. See Dominguez Murillo, Eladio, (83i:55021)
Herhandez, Luis J. See Dominguez Murillo, Eladio, (83i:55021)
Helaya, L. G. The addition operation in the functor D(X, A). (Russian. English and Georgian summaries) (83i:55014)

John R., (83h:55037)

Georgian summaries) (83f:55014)
Miller, Haynes See Harper, John R., (83h:55037)
Swigtek, Adela Category of cubical objects and category of simplicial objects.

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57-XX MANIFOLDS AND CELL COMPLEXES (For complex manifolds, see 32C10.)

57-01 Elementary exposition, textbooks

Burckel, R. B. Inessential maps and classical Euclidean topology. 83h:57001

Bayer, Gerhard **Studien zur verallgemeinerten Cohomologie komplexer projektiver Räume. (German) [Studies on the generalized cohomology of complex projective spaces] (83m:55001)

spaces (83m-53001)
Fomenko, A. T. See Mishchenko, A. S., (83m-53001)
Griffiths, H. B. ★Surfaces. (83h-57007)
Mishchenko, A. S. (with Fomenko, A. T.) ★Курс дифференциальной геометрии топологии. (Russian) [A course in differential geometry and topology] (85m-53001)
Palais, Richard S. ★Real algebraic differential topology. Part I. (83j:14001)

57-02 Advanced exposition (research surveys, monographs, etc.)

Fuks, D. B. Foliations. (Russian) 83a:57001 Mandelbaum, Richard ★Четырехыерная топология. (Russian) [Four-dimensional topology] 83i:57001

(Viro, O. Ya.) See Mandelbaum, Richard, 83:57001

secondary classifications:

Bayer, Gerhard ★Studien zur verallgemeinerten Cohomologie komplexer projektiver Räume. (German) [Studies on the generalized cohomology of complex projective spaces] (83m:55001)

Horvatić, Krešo Embedding and unknotting polyhedra. (83h:57012)

57-03 Historical (must also be assigned at least one classification number from Section 01)

57-04 Explicit machine computation and programs (not the theory of computation or programming)

57-06 Proceedings, conferences, etc.

(Brown, Ronald) See Low-dimensional topology, 83e:57001
(Thickstun, T. L.) See Low-dimensional topology, 83e:57001
3- and 4-dimensional manifolds ★3- and 4-dimensional manifolds. (Japanese) 83m:57001
Algebraic topology, 83k:57001
Bangor See Low-dimensional topology, 1981. 83k:57001

Topology in Low Dimension *Low-dimensional topology. 83e:57001
Differential topology *Differential topology. 83e:57001
Knot theory *Knot theory. (Japanese) 83b:57001
Low-dimensional topology *Low-dimensional topology. 83e:57001
Mexico City See Proceedings: Special Seminar on Topology, 83e:57001
Descendings.

Special Seminar on Topology ★Seminario Especial de Topologia: Memorias. Vol. I. (Spanish) [Proceedings of the Special Seminar on Topology. Vol. I] 83€:57001

Topology ★Seminario Especial de Topología: Memorias. Vol. I. (Spanish)

[Proceedings of the Special Seminar on Topology. Vol. I] 83±57001

★Algebraic topology, 1981. 83±57001

Shape theory and topological spaces ★Shape theory and topological spaces. 83b:57002

Studies in topology ★Исследования по топологии. IV. (Russian) [Studies in topology. IV] 83e:57002

Differential Topology ★Differential topology. 83f:57001

3- and 4-Dimensional Manifolds See 3- and 4-dimensional manifolds, 83m:57001
Knot Theory See Knot theory, 83b:57001
Shape Theory and Topological Spaces See Shape theory and topological spaces, 83b:57002

Varenna See Differential topology, 83f:57001

secondary classifications:

(Adem, José) See Symposium: Algebraic Topology, (83j:55001)
(Borsuk, Karol) See Proceedings: International Conference on Geometric Topology, (83d:54003)

(Kane, Richard M.) See Current trends in algebraic topology, (83m:55002a) and

(Kirkor, Andrzej) See Proceedings: International Conference on Geon netric Topology,

ochman, Stanley O.) See Current trends in algebraic topology, (83m:55002a) and (83m:55002b)

(Selick, Paul) See Current trends in algebraic topology, (83m:55002a) and (83m:55002b)

mith, Victor P.) See Current trends in algebraic topology, (83m:55002a) and (83m:55002b)

Current Trends in Algebraic Topology *Current trends in algebraic topology. Part 1.

(R3m:25002a)

**Current trends in algebraic topology. Part 2. (R3m:25002b)

Geometric Topology. See: Proceedings: International Conference on Geometric

Topology. (R34:54003)

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*Current trends in algebraic topology. Part 2. (R3m:35002b)

London, Ont. See Current trends in algebraic topology, (R3m:55002a) and (R3m:55002b)

Oaxtepec See Symposium: Algebraic Topology, (83j:55001)

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mposium:

Algebraic Topology
Symposium on Algebraic Topology in honor of José Adem. (83;55001)

Topological Analytical Aspects of Singularity Theory See Topological analytical aspects of singularity theory, (KM:32002)

Topology of Transformation Groups See Topology of transformation groups,

(83a:57050)

Topological analytical aspects of singularity theory *Topological analytical aspects of singularity theory. (Japanese) (834:32602)

Topology of transformation groups *Topology of transformation groups. (Japanese) (83a:57050)

Warsaw See Proceedings: International Conference on Geometric Topology, (83d:54003)

57Mxx Low-dimensional topology (old 55Axx)

57M05 Fundamental group, presentations, free differential calculus

olski, Mark J. A new solution to the word problem in the fundamental groups of

alternating knots and links. 83k:57002 Kobayashi, Karuaki Standard representation curves of $\{\pi_1(M^3), \pi_1(M^3)\}$. 83k:57003 Osborne, R. P. Heegaard diagrams of lens spaces. 83e:57001

Bass, Hyman Automorphismes de schémas et de groupes de type fini. [Automorphisms of schemes and groups of finite type] (83j:14042)

Bieri, Robert A 1½-dimensional version of Hopf's theorem on the number of ends of a

Chiswell, Ian M. (with Collins, Donald J.; Huebschmann, Johannes) Aspherical group

presentations. (83a:20046)
lins, Donald J. See Chiswell, Ian M.; et al., (83a:20046)
sphegan, Ross Fixed points in finitely dominated compacta: the geometric meaning of niecture of H. Bass. (83h:57011)

Ganevskii, N. A. On double generated Kleinian groups. (Russian) (83f:30040)
Heil, W. Normalizers of incompressible surfaces in 3-manifolds. (Serbo-Croatian

summary) (83d:57007)
ebschmann, Johannes Aspherical 2-complexes and an unsettled problem of J. H. C.
Whitehead. (83e:57004)

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See also Chiswell, Ian M.; et al., (83a:20046)

Jackson, Bradley W. End invariants of group extensions. (83a:57002)

Litherland, R. A. The second homology of the group of a knotted surface. (83a:57024)

Minkus, Jerome The branched cyclic coverings of 2 bridge knots and links. (83g:57004)

Rassias, George M. Homotopy properties of CW-complexes. (83g:55002)

Terada, Toshiaki Quelques propriétés géométriques du domaine de F₁ et le groupe de tresses colorées. [Some geometric properties of the domain of F₁ and the group of colored braids] (83h:32008)

57M10 Covering spaces

Jackson, Bradley W. End invariants of group extensions. 83a:57002

57M12 Special coverings, e.g. branched

DeGeorge, David L. (with Reddy, William L.) Branch set linking for nonorientable

Edmonds, Allan L. (with Ewing, John H.; Kulkarni, Ravi S.) Regular tessellations of

surfaces and (p,q,2)-triangle groups. 83k:57005 Ewing, John H. See Edmonds, Allan L.; et al., 83k:57005 Hunt, J. H. V. Branched coverings as uniform completions of unbranched coverings (résumé). (See 83j:55001)

Kanenoba, Talzo A note on 2-fold branched covering spaces of S³. 83a:57003 Kulkarni, Ravi S. See Edmonds, Allan L.; et al., 83b:57005

Little, Robert D. Projective space as a branched covering with orientable branch set.

Meeks, William H., III Circles invariant under diffeomorphisms of finite order. 83e:57003

Reddy, William L. See DeGeorge, David L., #3h:57004

Sakuma, Makoto Surface bundles over S⁴ which are 2-fold branched cyclic coverings of S3 831-57007

secondary classifications:

Edmonds, Allan L. Surface symmetry. I. (83):57003)
Giller, Cole A. A family of links and the Conway calculus. (83):57001)

Gilman, Jane (with Patterson, David B.) Intersection matrices for bases adapted to automorphisms of a compact Riemann surface. (83a:30046)

Kim, Palk Kee (with Sanderson, Donald E.) Orientation-reversing PL involutions on

orientable torus bundles over S¹. (83k:57017)
Lickorish, W. B. Raymond Prime knots and tangles. (834:57004)
Livingston, Charles More 3-manifolds with multiple knot-surgery and branched-cover

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descriptions. (83j-57002)

Malgoire, Jean See Volsin, Christine, (83d-57006)

Minkus, Jerome The branched cyclic coverings of 2 bridge knots and links. (83g-57004)

Phtterson, David B. See Gilman, June, (83a-30046)

Raymond, Frank (with Tollefson, Jeffrey L.) Correction to: "Closed 3-manifolds with no periodic maps" [Trans. Amer. Math. Soc. 221 (1976), no. 2, 403–418; MR 54 #3703].

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Sanderson, Donald E. See Kim, Palk Kee, (83h:57017)

Shalen, Peter B. A torus theorem for regular branched covers of S³. (83d:57012)

Tollefson, Jeffrey L. See Raymond, Frank, (83k:57033)

Voisin, Christine (with Malgoire, Jean) ★Cartes topologiques infinies et revêtements ramifiés de la sphère. (French) [Infinite topological maps and branched coverings of the sphere] (83d:57006)

57M15 Relations with graph theory [See also 05Cxx.]

Bahrampour, Y. (with Chezelayage, M.; Mashinchi, M.) An example of a simply connected noncontractable hazy space. 83m:57002

Burzio, Marco (with Demaria, Davide Carlo) The first normalization theorem for

alization theorem for regular Burzio, Marco (with Demaria, Davide Carlo) The first normalization theorem for reg homotopy of finite directed graphs, (Italian summary) 83m:57003
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Demaria, Davide Carlo See Buzzio, Marco, 83m:57003
Mashinchi, M. See Bahrampour, Y.; et al., 83m:57002
Yemini, Yechiam Some theoretical aspects of position-location problems. 83a:57004

secondary classifications:

Bell, Harold (with Brown, Ezra; Dickman, R. F., Jr.; Green, Edward L.) Circularity of graphs and continua: topology. (83m:54065)
Beresina, L. Ja. The normal curvatures of a graph. (83h:05061)
Björner, Anders On the homology of geometric lattices. (83d:05029)
Bouchet, André Constructions of covering triangulations with folds. (83h:05057)
Brown, Ezra See Bell, Harold; et al., (83m:54065)
Cairus, Stewart S. On a problem of Gauss. (83d:05030)
Dickman, R. F., Jr. See Bell, Harold; et al., (83m:54065)
Edmonds, Allan L. (with Ewing, John H.; Kulkarni, Ravi S.) Regular tessellations of surfaces and (p,q,2)-triangle groups. (83h:57005)
Ewing, John H. See Edmonds, Allan L.; et al., (83h:57005)
Florini, S. (with Lauri, J.) On the edge-reconstruction of graphs which triangulate surfaces. (83h:05065)
Flachsmeyer, Jürgen (with Wachtel, Hans-Joachim) A combinatorically topological look

surfaces. (EShc5065)
Flachsmeyer, Jürgen (with Wachtel, Hans-Joachim) A combinatorically topological look to the network theory. (E3hc5040)
Fu, King Sun See Liu, H. L., (E3b:34061)
Gagliardi, Carto Regular imbeddings of edge-coloured graphs. (Italian summary)

(83g:05932)
Green, Edward L. See Bell, Harold; et al., (83m:54065)
Grinstead, Charles M. Perfect graphs with nonnegative Euler characteristic. (83c:05050)
Jones, Gareth A. Graph imbeddings, groups, and Riemann surfaces. (83b:05061)
Kulkarni, Ravi S. See Edmonds, Allan L.; et al., (83h:57005)
Lauri, J. See Florini, S., (83h:05065)

Liu, H. L. (with Fu, King Sun) Cellwork topology, its network duals, and some applications—three-dimensional Karnaugh map and its virtual planar representation. applications (83b:94061)

Nakagawa, Yoko Genus of pretzel links $L(2p_1,\cdots,2p_n)$. (83j:57003) Wachtel, Hans-Joachim See Flachsmeyer, Jürgen, (83k:05040) Wormald, Nicholas C. On the number of planar maps. (83a:05074)

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Brandenburg, Joe (with Dyer, Micheal) On J. H. C. Whitehead's aspherical question. I. 834:57002

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Brown, Ronald (with Huebschmann, Johannes) Identities among relations. 83h:57008

Brunner, A. M. (with Ratcliffe, J. G.) Finite 2-complexes with infinitely-generated groups of self-homotopy-equivalences. 83m:57004

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Stefan, P. On Peiffer transformations, link diagrams and a question of J. H. C. Whitehead. 83e:57001

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secondary classifications:

Gross, Jonathan L. (with Rosen, Ronald H.) A combinatorial characterization of planar

Gross, Standard L. (Wife Rosen, Roman 11.) A Communication characterization 2-complexes. (831-85021)

Reda, Hiroshi (with Yamashita, Masakatsu) The collapsings maps of simplicial collapsings. (834:57015)

Rosen, Ronald H. See Gross, Jonathan L., (831:05021)

Yamashita, Masakatsu See Ikeda, Hiroshi, (834:57015)

57M25 Knots and links in S3 {For higher dimensions, see 57Q45.}

Akbulut, Selman (with King, Henry Churchill) All knots are algebraic. 83m:57005 Bayer, Eva (with Hillman, Jonathan A.; Kearton, C.) The factorization of simple knots.

R3.=5705 man, Joan S. On the conjugacy problem in the braid group. Errata: Braids, links, and mapping class groups [Ann. of Math. Stud., 82, Princeton Univ. Press, Princeton, N.J., 1974; MR 51 #11477]. Smr.57006

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chsteiner-Kiessling, E. Zur Theorie massiver Knoten. [On the theory of massive knots]

Cooper, D. The universal abelian cover of a link. 83g:57002 Fukuhara, Shinii On framed link

Cooper, D. The universal abelian cover of a link. 83g:57002

Fukuhara, Shinji On framed link groups. 83f:57003

Giller, Cole A. A family of links and the Conway calculus. 83g:57001

Giller, Patrick M. On the slice genus of knots. 83g:57003

Goldsmith, Deborah Louise Motion of links in the 3-sphere. 83k:57002

Gómez-Larrafaga, J. C. Totally knotted knots are prime. 83k:57003

Gordon, C. McA. (with Litherland, R. A.; Murasugi, Kunio) Signatures of covering links. 83a:57006

Ribbon concordance of knots in the 3-sphere. 83a:57007

Gustafson, Richard F. A simple genus one knot with incompressible spanning surfaces of arbitrarily high genus. 83a:57008

Harter, John L. How to construct all fibered knots and links. 83e:57007

Hartley, Richard I. Invertible amphicheiral knots. 83e:57002

On the classification of three-braid links. 83f:57004

an A. New proofs of two theorems on periodic knots. 83h:57003 See also Bayer, Eva; et al., 83e:57005

Joyce, David A classifying invariant of knots, the knot quandle. 83m:57007

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Lüdicke, Ulrich Darstellungen der Verkettungsgruppe. [Representations of link groups]

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Traidi, Lorenzo A generalization of Torres' second relation. 83c:57005 Tursey, V. G. Three-dimensional homology spheres and links with Alexander polynomial 1. (Russian. English summary) 83h:57010
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secondary classifications:

Brakes, W. R. Sewing-up link exteriors. (83m:57009)
Caims, Stewart S. On a problem of Gauss. (83i:05030)
Franks, John M. Kaots, links and symbolic dynamics. (83i:58074)
Gilmer, Patrick M. Configurations of surfaces in 4-manifolds. (83i:57027)

Comparations of surfaces in 4-manifolds. (solids. 7927)
 Harro, John L. Representing elements of π₁M³ by fibred knots. (83):57005)
 Harrold, O. G. (with Kinoshita, Shin'ichi) A theorem on θ-curves and its application to a problem of T. B. Rushing, (Russian summary) (838:57011)
 Kanenobu, Taizo A note on 2-fold branched covering spaces of S². (83a:57003)
 Kinoshita, Shin'ichi See Harrold, O. G., (83h:57011)
 Magnus, W. The uses of 2 by 2 matrices in combinatorial group theory. A survey.

Mond, D. M. Q. See Morton, H. R., (83g:14005)

Morton, H. R. (with Mond, D. M. Q.) Closed curves with no quadrisecants. (83g:14005)
Myers, Robert Simple knots in compact, orientable 3-manifolds. (83h:57018)
Ruberman, Daniel Imbedding four-manifolds and slicing links. (83d:57022)

Terada, Toshiski Quelques propriétés géométriques du domaine de F_1 et le groupe de tresses colorées. [Some geometric properties of the domain of F_1 and the group of colored braids] (83h:32008)

Tuler, Randy On the linking number of a 2-bridge link. (83a:22014)
Knot theory ★Knot theory. (Japanese) (83b:57001)

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57M30 Wild knots and surfaces, etc., wild imbeddings

Apodaca, Eugene Roger On the simultaneous embedding of uncountably many distinct wild arcs with one wild endpoint in E³, a geometric approach. 83tc57004

Bothe, Hans G. Homogeneously wild curves and infinite knot products. 83ac57010

Daverman, Robert J. A strongly homogeneous but wildly embedded Cantor set in the Hilbert cube. (Russsian summary) 83bc57005

Harreld, O. G. (with Kinoshita, Shin'ichi) A theorem on θ-curves and its application to a problem of T. B. Rushing. (Russian summary) 83bc57011

Kinoshita, Shin'ichi See Harrold, O. G., 83bc57011

secondary classifications:

Garza, Gene G. The semicellularity theorem. (83a:57020)

57M35 Dehn's lemma, sphere theorem, loop theorem, asphericity

Meeks, William H., III (with Yau, Shing Tung) The equivariant Dehn's lemma and loop

Yau, Shing Tung See Meeks, William H., III, 83b:57006

secondary classifications

Meeks, William H., III (with Yau, Shing Tung) Topology of three-dimensional manifolds and the embedding problems in minimal surface theory. (83d:53045)

Thurston, William P. Three-dimensional manifolds, Kleinian groups and hyperbolic

Yau, Shing Tung See Meeks, William H., III. (834:53045)

57M40 Characterizations of E3 and S3 (Poincaré conjecture) [See also 57N121

Verjovsky, Alberto Cobordism of three-dimensional spheres. (See 83j:55001)

secondary classifications:

Reds, Hiroshi Acyclic 3-manifolds without closed chain. (83±57008)

Myers, Robert Simple knots in compact, orientable 3-manifolds. (83k:57018)

Thurston, William P. Three-dimensional manifolds, Kleinian groups and hyperbolic geometry. (83k:57019)

57M99 None of the above, but in this section

Miller, Richard T. Geodesic laminations from Nielsen's viewpoint. 83j:57064 Murassapi, Kunio Seifert fibre spaces and braid groups. 83f:57007 Negami, Seiya Irreducible 3-manifolds with nontrivial π_2 . 83i:57004

secondary classifications:

Baskan, T. (with Macbeath, A. M.) Centralizers of reflections in crystallographic groups. (83):20050

(83):20009
Elsenbud, David (with Hirsch, Ulrich; Neumann, Walter D.) Transverse foliations of Seifert bundles and self-homeomorphism of the circle. (83):57016)
Francis, George K. (with Troyer, Stephanie F.) Continuation: excellent maps with given folds and cusps. (83m:58019)

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Hirsch, Ulrich See Eisenbud, David; et al., (83j:57016)
Macbeath, A. M. See Backan, T., (83j:20050)
Moishezon, B. G. Stable branch curves and braid monodromies. (83e:14708)
Neumann, Walter D. See Eisenbud, David; et al., (83j:57016)

Plotnick, Steven Circle actions and fundamental groups for homology 4-spheres.
(83):57025)

Scholz, Erhard *Geschichte des Mannigfaltigkeitsbegriffs von Riemann bis Poincaré. (German) [History of the manifold concept from Riemann to Poincaré] (83k-58001)
Troyer, Stephanie F. See Francis, George K., (83m:58019)
Zanetic, Vera L. Carrara Extensions of immersions in codimension one and

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Giachetti, Riccardo Hamiltonian systems with symmetry: an introduction. (83f:580)
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Misschemko, A. S. (with Fomenko, A. T.) ЖКурс двфференциальной геометрав в топология. (Russian) [A course in differential geometry and topology] (83a:53001) Odoux, J. See Ramis, E.; et al., (83d:53001)
Oehmike, Robert H. On the geometry of Lie-admissible algebras. (83j:53024)
Ramis, E. (with Deschamps, C.; Odoux, J.) ★Cours de mathématiques spéciales. 5. (French) [Course of advanced mathématics 5] (83d:55001)
Schwartz, Laurent ★Les tenseurs. (French) [Tensors] (83k:15003)
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58-02 Advanced exposition (research surveys, monographs, etc.)

wski, Igor (with Mira, Christian) *Dynamique chaotique. (French) [Chaotic

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58-03 Historical (must also be assigned at least one classification number from Section 01)

Scholz, Erhard *Geschichte des Mannigfaltigkeitsbegriffs von Riemann bis Poincaré.

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ers, Jürgen Christoffel's work on the equivalence problem for Riemannian spaces and its importance for modern field theories of physics. (83h:01041)

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58-04 Explicit machine computation and programs (not the theory of computation or programming)

Abraham, R. The macroscopy of resonance. (83g:58044)

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plexes. (English summary) [Iteration of complex quadratic polynomials] n58046)

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Dynamical systems. (83e:59026)

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ogradov, A. M. The geometry of nonlinear differential equations. (Russian) (RM:58065)

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Boyer, Charles P. On the structure of supermanifolds. (See 83i:55001)

secondary classifications:

Bernstein, Joseph N. (with Leites, D. A.) Invariant differential operators and irreducible presentations of Lie superalgebras of vector fields. (Russian) (83:17015a)
a, L. (with Pasti, P.; Tonin, M.) Supermanifolds and BRS transformation

(83m:81075) Castellant, Leonardo (with Fré, P.; van Nieuwenhuizen, P.) A review of the group manifold approach and its application to conformal supergravity. (838:83036)

Dax, Anadijihan See Kloster, S., (83e:83032)

D'Auris, R. (with Maina, E.; Regge, Tullio; Fré, P.) Geometrical first order supergravity in five space time dimensions. (83d:83050)

(with Fré, P.; Maina, E.; Regge, Tullio) A new group theoretical technique for the analysis of Bianchi identities and its application to the auxiliary field problem of D=5 supergravity. (83i:83056)

Dubus, Edwards J. Open covers and infinitary operations in C**-rings. (83m:18010)

Fré, P. See D'Auria, R.; et al., (83d:83050); Castellani, Leonardo; et al., (83f:83036) and D'Auria, R.; et al., (83i:836

Gates, S. J., Jr. (with Roček, M.; Siegel, W.) Solution to constraints for n=0

supergravity. (83j:83057) Geroch, Robert Building this

Geroch, Robert Building things in general relativity. (83:83007)

Kloster, S. (with Das, Anadijiban) Pre-atlas manifolds and coordinate-free general relativity. (83e:83032)

k, Anders *Synthetic differential geometry. (83f:51023)
valczyk, Adam Extrema on differential spaces. (83j:50009)

Leites, D. A. Irreducible representations of Lie superalgebras of vector fields and invariant differential operators. (Russian) (83):17011)

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Machado, Armando A locally closed set with a smooth group structure is a Lie group. (834:22007)

K. See D'Auria, R.; et al., (83d:83050) and (83d:83056)
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Regge, Tallio See D'Auria, R.; et al., (83s:83050) and (83s:83056)

Regge, Gonzalo E. Analyse dans les topos lisses. [Analysis on smooth topoi] (83m:13018)

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Scholz, Erhard **A Geschichte des Mannigfaltigkeitsbegriffs von Riemann bis Poincaré. (German) [History of the manifold concept from Riemann to Poincaré] (83h:58001)

Shao, Chang Gui The superspace and its unified supergravity theory. (Chinese. English summary) (83s:85052)

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58A10 Differential forms

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Ngo Van Quê (with Roussarie, Robert) Sur l'isot

Van Qué (with Rousaire, Robert) Sur l'isotopie des formes fermées en dimension 3.

[On isotopy of closed forms in dimension 3] 83h:58006

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Modèles locaux des 3-formes fermées transitives sur les 5-variétés; cas où dim E=3 et $L_{V|E}$ non nilpotent. (English summary) [Local models of transitive closed 3-forms on 5-manifolds: case where dim E=3 and $L_{V|E}$ is nonnilpotent] 83d:58006 Modèles locaux de 3-formes fermées transitives sur les 5-variétés; cas où dim E=3

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secondary classifications:

Banyaga, Augustin (with Urwin, Ross W.) Sur la cohomologie du groupe des diffeomorphismes. (English summary) [On the cohomology of the group of diffeomorphisms] (83f:58023)

ger, Martin Transportform und Grundlösung der Laplacegleichung in Fubiniräumen. II. Mit Bemerkungen zur Effektivität von Formen. [Transportation form and fundamental solution of the Laplace equation in Fubini spaces. II. With remarks on the effectiveness of forms] (83i:53087)

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Bernstein, Joseph N. (with Leites, D. A.) Invariant differential operators and irreducible representations of Lie superalgebras of vector fields. (Russian) (831:17015a)

Bruschi, Massimo (with Calogero, F.) Finite-dimensional matrix representations of the operator of differentiation through the algebra of raising and lowering operators: general properties and explicit examples. (Italian and Russian summaries) (83:15006)

Busse, H.-G. (with Havsteen, B.) Equivalence to thermodynamic functions induced in nonlinear systems by symmetries of transformation groups. (83m:35008)

Calogero, F. See Bruschi, Massimo, (83:15006)

Caselle, M. (with Megna, R.; Sciuto, S.) Generalizations of the sine-Gordon equation with SU_{p+p}/S(U_p×U_p) structure. (Italian and Russian summaries) (83:81086)

Cerveau, Dominique (with Moussu, Robert) Extension des facteurs intégrants et applications. (English summary) [Extension of integrating factors and applications] (83:e:58006)

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The linear integral equations associated with any antiexact solution of the Yang-Mills free field equations. (83e:81086)

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Pitis, Gheorgh E. Sur la cohomologie d'une classe de systèmes projectifs. [Cohomology of a class of projective systems] (83m:55008)

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Kamber, Franz W. (with Tondeur, Philippe) Dualité de Poincaré pour les feuilletages harmoniques. (English summary) [Poincaré duality for harmonic foliations]

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58D10 Spaces of imbeddings and immersions

58D15 Manifolds of mappings [See also 54C35.]

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